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INDEX

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VOLUME XXXIV
JANUARY, 1935—DECEMBER, 1935

INDEX VOL. XXXIV, 1935

Scientific Articles

Page

Abortion, The Management of—Cron, Lahmann --- 327
Acne Vulgaris; Discussion of Some Aspects — Markson-Miller ---------- 895
Alcoholism, Medicolegal Aspects of—Kozelka ----- 816
Allergy, Mold; Its Importance in Asthma and Hay Fever—Feinberg ------ 254
Anemia; A Summary of the Causes with Fundamentals Concerning Treatment—Giffin ---------- 106
Appendicitis, Acute—Tormey 456
Arthroplasty, the Present Status of—MacAusland 95
Blind (Color), Safety Spectacles for the—Chapman 35
Bromide Intoxication, Treatment of—Toenhart ---- 901
Calculus (Renal), the Complete Dissolution of a Large—Kearns ------- 179
Cancer of the Breast—Erskine ---------- 623
Cancer, End Results in the Surgical Treatment of—Smith ---------- 234
Cancer, some Everyday Problems in the Diagnosis and Treatment of—Fischel ---------- 100
Carcinoma of the Colon—Stratton ---------- 741
Carcinoma of Testicle; Postoperative Sequelae and Treatment—Kuegle ---- 920
Carcinomata (Small) of the Stomach, the Roentgen Diagnosis of—Rigler--- 236
Cardiac Pain: The Differentiation of Genuine Cardiac Pain from Conditions Simulating it—Murphy ---------- 163
Cataract Extractions: Report of 108 Intracapsular and 47 Extracapsular—Carl 37
Cataract in Insane, Management of—Chapman---- 831
Cervix Uteri, Diseases of—Davis ---------- 536
Cholecystectomy, The Prevention and Treatment of Complications Following—Hayes -------- 731
Cholelithiasis, Surgical Problems Association with—Dinsmore ---- -------- 467

Page

Colitis (Ulcerative), Antivirus Treatment of—Oesterlin, Johnson, Kinsey, Willett ---------- 538
Colon, Diseases of—Hodges- 821
Complication (Surgical), the Prevention of — Judd, Waldron ---------- 87
Disease, Prevention of, Recent Methods in—Schwartz ---------- 911
Diabetic, The, As A Surgical Risk—Jordan --------- 918
Dermatitis, Infectious Eczematoid — Foerster, Foerster ---------- 305
Fever (Hay), Treatment by Ionization Method—Hurlbut ---------- 93
Fever, Scarlet—Fox ------- 19
Fractures, Open Reduction Treatment of — Jackson 11
Heart Failure, Treatment of the Patient Who Has—Warfield ---------- 546
Heart in Surgery, The—Patek ---------- 386
Hemorrhage, Internal; Diagnosis and Treatment—Witte ---------- 460
Hemorrhage, Spontaneous Subarachnoid; Report of Twelve Cases—Masten-- 168
Hodgkin's Granuloma; Radiation Therapy—Pohle -- 632
Hydrocele, Its Treatment by the Injection Method—Ewell, Sargent, Marquardt ---------- 451
Hyperleucocytosis in Pneumonia; Report of Literature and Case Report—Birk, De Nosaquo ------ 615
Hypersensitivity (Drug) as a Cause of Acute Primary Granulocytopenia —Squier, Madison ----- 175
Infections (Common) of Urinary Tract and Their Treatment—Sargent --- 395
Intestine (Small), Clinical Conditions Associated with Congenital Anomalies of—Montgomery--- 826
Kidneys, Abnormal Positions of—Sexton ---------- 184
Kidney, Surgical Infection of —Carson ---------- 903
Lesions of the Skin, Diagnosis and Treatment of Common Precancerous—Farrell ---------- 241

Page

Leukemina; Radiation Therapy in—Pohle --------- 632
Ludwig's Angina (Suprahyoid Phlegmon) — Gingrass ---------- 905
Marrow Insufficiency, The Clinical Expressions of—Middleton, Meyer ------ 231
Neuralgias of the Head and Neck—Bryan --------- 320
Neuralgia of Trunk and Extremeties — Rosenberger 318
Neutropenia, Malignant; Case Report—Hardgrove 630
Obstruction (Intestinal), Diagnostic and Therapeutic Considerations in the Management of — Wangensteen ---------- 24
Parkinsonian Syndrome, Unilateral Postencephalitic; Report of Two Cases—Jordan ---------- 185
Pruritus (Toxic), Secondary to Chronic Nephritis—Reuter ---------- 38
Puncture (Lumbar), A New Procedure for — Reese, Shulak ---------- 613
Pyelitis of Pregnancy, The Early Diagnosis and Treatment of—Harris-- 379
Rays (Roentgen) on Tuberculous Processes, The Action of—Desjardins ---- 719
Resection, Prostatic — Kretschmer ---------- 390
Sedimentation Rate in General Practice—Schindler, Gnagi ---------- 531
Serum (Human Convalescent); Use in Infectious Diseases—Hardgrove -- 812
Spondylolisthesis (Early); Case Report—Carter--- 552
Surgery, Neurological—Davis ---------- 309
Surgery (Urological) in Children — Kretschmer 832
Surgery (Abdominal), Pitfalls in—Marshall ----- 736
Therapy (Radiation) in Medical Practice. IV. Leukemia, Hodgkin's Granuloma and Allied Diseases — Pohle -------- 632
Thrombosis (Coronary) and Its Sequelae—Jermain-- 381
Thyroid Diseases in Children —Doege ---------- 627

Page
Torsion of the Spermatic Cord — Marquardt ---- 33
Toxicological Examination, Selection of Material for Kozelka ---------- 898
Tuberculosis, Genitourinary —Thomas, Kinsella --- 398
Tuberculosis and the Family Doctor—Dearholt ------ 891

Page
Tuberculosis of the Spine—Schneider, Van Hecke-- 618
Tuberculosis (Pulmonary), Surgical Treatment in at Wisconsin State Sanatorium — Thompson, Steinkopff, Bulley, Yoran 553
Tumors of the Mammary Gland—Snodgrass ----- 624

Page
Ulcers (Gastric and Duodenal); Factors Essential to Their Successful Medical Management—Eusterman ---------- 473
Ulcer, Peptic—Connell ----- 527
Ulcer, Peptic, Cause of—Twohig ---------- 530
Ulcer, Perforated—Dean---- 251

Other Articles

Alcohol Regulations and Permits; Official Statement —Henry ---------- 655
Anti Fee-Splitting Law---- 780
American Medical Association in Special Session Reaffirms Position Against Compulsory Sickness Insurance----- 197
Cancer Clinic, Nearly 400 Attend ---------- 656
Cancer Postgraduate Course for Wisconsin Physicians ---------- 417
Cancer Film Strips, Manuscripts, and Projectors Available from State Society ---------- 273
Convalescent Serum Center Established at Columbia Hospital, Milwaukee; To Serve State ---------- 347
Copeland Modified Drugs and Foods Bill -- ----- 134
Debate "Socialized Medicine" in Wisconsin High Schools ---------- 343
Debate Question for High Schools Not Determined: May Reject Question of "Socialized Medicine" ---------- 419
Destiny, Controlling Our—Cary ---------- 805
Dissection, Early Efforts of the Wisconsin State Medical Society to Legalize—Miller --------- 853
Essay Contest, Council Announces Medical Economics Contest Open to General Membership ------ 125
Examiners Appointed ------ 47
Hunter (Dr. Amy L.) New Director State Bureau of Maternity and Child Welfare ---------- 506
Infant and Maternal Mortality Rates in Wisconsin—Hunter ---------- 636
Interstate Postgraduate Meeting ---------- 782
Legislature, 1935:
Accident Cases, Assembly Votes 51–36 Killing Bill to Give Hospitals, Physicians and Nurses Right of Partial Assignment in --------- 496
Alcohol and Medicinal Liquor Fee; Physicians and Hospitals Exempted ---------- 504
Basic Science Exemption Bill Killed ---------- 494
Chiropractic "Doctor Title" Bill Passed by Assembly ---------- 424
Chiropractic – Naturopathic Program Fails in Wisconsin Legislature ---------- 570
Chiropractors Seek Compensation Act Rights, Basic Science Exemptions and Use of Title "Doctor" ---------- 273
Chiropractors Seek to "Short Circuit" Basic Science Act --------- 348
Chiropractors Win Assembly Battle to Extend Privileges; Senate to Decide ---------- 344
Costs of Medical Care Legislative Proposal Introduced ---------- 199
Costs of Medical Care Proposal Killed in Senate; Advanced in Assembly ---------- 276
Medical Grievance Committee Bill Advanced---- 350
Medical Grievance Committee Bill Signed ----- 428
Malpractice Suits—Legislature Kills Last-Minute Bill Extending Time ---------- 780
Naturopathic Measure Fails in Assembly---- 494
Naturopathic Bill Advanced in Assembly--- 419
Naturopaths Seek License in Wisconsin; Assembly Bill proposes Exemption for Present Practitioners -------- 347
Report on Legislature Work of the Committee on Public Policy-- 657
Licentiates ---------- 680
Malpractice in the Use or Non-Use of the X-Ray—Freeman, Drechsler---- 673
Maternal Mortality Rates in Wisconsin — Hunter--- 636
Medical Economics Page 124-195-268-341-415-490-568-753-851
Medical Library Service Fills over Five Hundred Requests in April; Available to All—Ramsey --- 426
Presidential Address — Carter ---------- 713
President's Page ---------- --114-261-406-483-560-642-842
Sanatorium Care, Getting—Wisconsin State Sanatorium Superintendents' Association ---------- 862
Tax (Income) Provisions Affecting Medical Profession:
Federal ---------- 51
State ---------- 55
Wagner Social Insurance Bill Analyzed; Large Health Subsidies to States ---- 126
U. S. Employees' Compensation Commission — Submitting Bills to ------- 858

Authors of Articles

Birk, B. J., Milwaukee------ 615
Bryan, A. W., Madison----- 320
Bulley, K. G., Statesan----- 553
Carl, E. E. Milwaukee----- 37
Carson, W. J., Milwaukee--- 903
Carter, R. M., Green Bay 552–713
Cary, Edward H., Dallas, Texas ---------- 805
Chapman, V. A., Milwaukee ----------35–831
Connell, F. G., Oshkosh---- 527
Cron, R. S., Milwaukee----- 327
Davis, C. H., Milwaukee---- 536
Davis, Loyal, Chicago ----- 309
Dean, Joseph, Madison----- 251
Dearholt, H. E., Milwaukee- 891
De Nosaquo, Norman, Milwaukee ---------- 615
Desjardins, A. U., Rochester 719
Dinsmore, R. S., Chicago--- 467
Doege, K. H., Marshfield--- 627
Drechsler, R. A., Milwaukee 673
Erskine, A. W., Cedar Rapids, Iowa ---------- 623
Eusterman, G. B., Rochester 473
Ewell, G. H., Madison------ 451
Farrell, H. J., Milwaukee--- 241
Feinberg, S. M., Chicago---- 254
Fischel, Ellis, St. Louis---- 100
Foerster, O. H., Milwaukee-- 305
Foerster, H. R., Milwaukee-- 305
Fox, Max J., Milwaukee---- 19
Freeman, R. R., Milwaukee-- 673
Giffin, H. Z., Rochester----- 106
Gingrass, R. P., Milwaukee-- 905
Gnagi, W. B., Monroe------ 531
Hardgrove, Maurice, Milwaukee ----------630–812
Harris, John W., Madison-- 379

1936

Page
Hayes, J. M., Minneapolis 731
Henry, R. K., Madison 655
Hodges, F. J., Ann Arbor, Mich. 821
Hunter, Amy L., Madison 636
Hurlbut, J. A., Madison 93
Jackson, James A., Madison 11
Jermain, W. M., Milwaukee 381
Johnson, A. W., Milwaukee 538
Jordan, E. M., Green Bay 185
Judd, E. Starr, Rochester 87
Kearns, W. M., Milwaukee 179
Kinsella, T. J., Oak Terrace, Minn. 398
Kinsey, Jack, Milwaukee 538
Kozelka, F. L., Madison 816
Kretschmer, H. L., Chicago 390–832
Kuegle, F. H., Janesville 920
Lahmann, A. H., Milwaukee 327
MacAusland, W. R., Boston 95
Madison, F. W., Milwaukee 175
Markson, S. M., Milwaukee 895

Page
Marquardt, C. R., Milwaukee 33–451
Marshall, V. F., Appleton 736
Masten, Mabel G., Madison 168
Meyer, O. O., Madison 231
Middleton, W. S., Madison 231
Miller, H. L., Milwaukee 895
Miller, William Snow, Madison 853
Montgomery, A. H., Chicago 826
Murphy, F. D., Milwaukee 163
Oesterlin, E. J., Springfield, Ohio 538
Patek, A. J., Milwaukee 386
Pohle, E. A., Madison 632
Ramsey, Gladys, Madison 426
Reese, Hans H., Madison 613
Reuter, M. J., Milwaukee 38
Rigler, Leo G., Minneapolis 236
Rosenberger, A. I., Milwaukee 318
Sargent, James C., Milwaukee 395–451

Page
Schindler, J. A., Monroe 531
Schneider, C. C., Milwaukee 615
Schwartz, A. B., Milwaukee 911
Sexton, W. G., Marshfield 184
Shulak, I. B., Madison 613
Snodgrass, T. J., Janesville 624
Smith, Joseph F., Wausau 234
Squier, T. L., Milwaukee 175
Steinkopff, E. K., Statesan 553
Stratton, F. A., Milwaukee 741
Thomas, G. J., Minneapolis 398
Thompson, R. D., Statesan 553
Toenhart, O. E., Madison 901
Tormey, Albert, Madison 456
Twohig, D. J., Fond du Lac 530
Van Hecke, Leander, Milwaukee 618
Waldron, G. W., Rochester 87
Wangensteen, O. H., Minneapolis 24
Warfield, L. M., Milwaukee 546
Willett, Thomas, West Allis 538
Witte, Dexter H., Milwaukee 460
Yoran, C. M., Statesan 553

Editorials

Accomplishment, High 478
Aid of Modern Weapons 259
Annual Reports, The 559
Balance 556
Business of Medicine 922
County Secretary 744
Constipation 404
Constipation, Treatment of 557
Dan. V—VII 187
Dr. Louis Francis Jermain 640
Dr. William Shainline Middleton 479
Edema 41
Foot Disorders 260
Goiter, Use and Abuse of Iodine in Treatment 40
Help Your Secretary 923
Hematuria 840
Hyperparathyroidism and Urinary Calculi 188
Iodine in Treatment of Goiter —Use and Abuse 40
Necessary Procedure 922
Oxygen Therapy 641
Prostatectomy or Transurethral Resection 258
Reminder, A 187
Three National Officers 478
Tonsillectomy, the Problem of 332
Tribute, A Fine 113
Ulcer, Peptic (Non-resectable) 112
Urinary Tract Calculi 186
W.P.A. Compensation Accident Cases 841

Activities

Annual Meeting, 1935:
Preliminary Program 571
Final Program 647
Report of Meeting 757
Committee Appointments 758
Council Awards 758
House of Delegates 759
Committees Selected 760
Councilor Elections 760
Dues 760
Golf tournament 761
Registrants 765
Committee Reports:
Committee on Cancer 590
Committee on Health and Public Instruction 588
Committee on History 596
Committee on Medical Economics 594
Committee on Medical Education and Hospitals 592
Committee on Medical Defense 590
Committee on Necrology 590
Committee on Public Policy 582
Committee on Scientific Work 592
Committee of State Society
Council Meetings:
January Meeting 127
September Meetings 980
County Society Meetings:
Ashland-Bayfield-Iron 43
Barron-Washburn-Sawyer-Burnett 115-482-844-926
Brown-Kewaunee-Door 115-189-334-844
Calumet 115-926
Chippewa 334-407-746-844
Clark 43-562-844
Columbia 115-189-643-926
Crawford 844
Dane 43-115-189-262-407-746 844-926
Dodge 115-334
Douglas 115
Eau Claire-Dunn-Pepin 115-189-926
Fond du Lac 844-926
Forest 262
Grant 926
Green 43-482
Green Lake-Waushara-Adams 43-189-482
Juneau 927
Jefferson 43-262
Kenosha 43-189-482-927
Langlade 115-334
Lincoln 844
Manitowoc 116-927
Marathon 43
Marinette-Florence 116-482
Milwaukee 43-1161262-334-407-844-927
Oneida-Vilas 407
Outagamie 44-262-334-844-927
Pierce-St. Croix 116-844
Polk 116-262-482-845-927
Portage 116-746-927
Racine 116-262-334
Richland 44-189-262
Rock 117-262-334-407-845
Shawano 117-263
Sheboygan 44-117-189-335-482
Trempealeau-Jackson-Buffalo 263-407-482-643-845
Walworth 117
Washington-Ozaukee 335
Waukesha 44-263-335-482
Winnebago 117-335-407-643
Wood 263-482-845
Other Societies:
First Councilor District 845
Fourth Councilor District 482
Fifth Councilor District 562
Sixth Councilor District 189-845
Seventh Councilor District 335
Ninth Councilor District 117-407-746-845
Tenth Councilor District 407
Central Wisconsin Society of Ophthalmologists 483
Green Bay Academy of Medicine 189-408
Madison Academy of Medicine 190
Milwaukee Academy of Medicine 45-190-263-335-408-845-927
Milwaukee Hospital Interns 408
Milwaukee Neuro-Psychiatric 117 190-263-336-408-483-562-845

Page
Milwaukee Oto-Ophthalmic --45-190-263-336-408-845-927
Milwaukee Pathological---- 118
Milwaukee Pediatric ----118-483
Milwaukee Society of Clinical Surgery ----118-190-336-845
Radiological Section of State Society ---------- 343
University of Wisconsin-408-927
Wisconsin Urological Society 408

Page
House of Delegates Attendance ---------- 978
House of Delegates, Proceedings of ---------- 937
House of Delegates, Names of Members ---------- 576
Index ----------1009
Membership of State Society
Officers and Committees of State Society --------- 984

Page
Reports of Officers:
Chairman of Council----- 577
Secretary-Managing Editor ---------- 577
Treasurer ---------- 577
Woman's Auxiliary 48-118-191 264-336-409-483-563-643-746 ----------846-928

Book Reviews

Anatomy, Applied --------- 64
Anatomy, Elementary Human ---------- 356
Anatomy, Human ---------- 354
A.M.A. Council on Pharmacy and Chemistry Reports, 1934 ---------- 694
Biochemistry, Textbook of-- 686
Body Mechanics ---------- 212
Bronchoscopy, Esophagoscopy and Gastroscopy-- 138
Child, The Spastic -------- 68
Clinical Laboratory Methods and Diagnosis --------- 688
Clinical Laboratory Methods, Manual of ---------- 140
Clinical Neurology, A Textbook of ---------- 688
Conception Period of Women 64
Control (Birth), Modern Method of ---------- 432
Crippled and the Disabled, The ---------- 356
Diabetes Mellitus and Obesity 212
Diagnosis, Definite, In General Practice --------- 70
Diagnosis, Physical -------- 360
Disease, Gadfly of the Mind 140
Diseases, Autonomic, or the Rheumatic Syndrome--- 288
Doctors and Juries--------- 508
Drugs, Useful ---------- 686
Electrocardiography ------- 70
Electrocardiography, Illustrative ---------- 430
Electrotherapy and Light Therapy ---------- 686
Embryology, Aids to ------- 356
Emotions and Bodily Changes 692
Endocrinology, Practical --- 140
Fertility and Sterility in Women, Periodic --------- 138
Genitourinary Diseases, Synopsis of ---------- 64
General Medicine, the 1934 Year Book ---------- 138
Gynecology ---------- 70
Gynecology, A Textbook of-- 66
Gynecology, A Textbook of-- 68
Heart Disease ---------- 354
Heart Visible, The --------- 144
International Medical Annual 690
Martini's Principles and Practice of Physical Diagnosis ---------- 686
Medical Clinics of North America ----------354
Medicine, How to Practice-- 142
Memoirs of a Small-Town Surgeon ---------- 360
Men, The Dangerous Age--- 68
Mother, The Prospective---- 66
Motherhood, Modern ------- 688
Mouth Infection ---------- 352
Nomenclature of Disease, Standard Classified----- 144
Nursing, An Activity Analysis ---------- 66
Nursing Schools Today and Tomorrow ---------- 70
Obstetrics and Gynecology, 1934 Year Book ------- 360
Operations, Names of Surgical ---------- 432
Pathology (Surgical) of the Peritoneum ---------- 432
Pathology, Textbook of----- 142
Patient and the Weather--- 144
Patient, the Nervous------- 688
Pediatrics, Synopsis of----- 212
Period, The Safe ---------- 212
Perversion, Female Sex---- 352
Physiology in Health and Disease ---------- 68
Physiology in Modern Medicine ---------- 430
Power to Love ---------- 68
Practice of Medicine, A Manual of ---------- 68
Principles and Practice of Medicine ---------- 690
Psychiatry, Aids to -------- 214
Psychology Applied-------- 686
Psychology, Social --------- 360
Psychiatry, Objective and Experimental --------- 786
Public Health, Policies and Procedure ---------- 786
Publishing, One Hundred and Fifty Years ---------- 356
Remedies, New and Nonofficial ---------- 432
Report of Seventh International Congress of Military Medicine and Pharmacy and Meetings of the Permanent Committee ---------- 356
Romance of Exploration and Emergency; First Aid from Stanley to Byrd--- 432
Sculpture in the Living----- 212
Silicosis, Symposium on ---- 66
Stammering and Allied Disorders ---------- 354
Surgery, General, 1934 Year Book ---------- 142
Surgery, Minor ---------- 66
Surgery, A Textbook of---- 430
Syphilis, Clinical Management of ---------- 508
Therapy, Bee-Venom ------ 430
Treatment by Diet --------
Treatment, Methods of ---- 352
Tuberculosis — 1,000 Questions and Answers----- 784
Tumors of Female Pelvic Organs ---------- 140
Urology, Principles and Practice of ---------- 688
Woman Asks the Doctor, The 784

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pp. 63-94

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IN THIS ISSUE

OPEN REDUCTION OF FRACTURES
By J. A. Jackson, M. D.

SCARLET FEVER
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By O. H. Wangensteen, M. D.

INCOME TAX SUMMARY
I. FEDERAL
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TABLE OF CONTENTS PAGE 4

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TABLE OF CONTENTS

ORIGINAL ARTICLES

Page

Open Reduction Treatment of Fractures by James A. Jackson, M.D., Madison ---------- 11

Scarlet Fever by Max J. Fox, M.D., Milwaukee -- 19

Diagnostic and Therapeutic Considerations in the Management of Acute Intestinal Obstruction by Owen H. Wangensteen, M.D., Minneapolis -- 24

Torsion of the Spermatic Cord by C. R. Marquardt, M.D., Milwaukee ---------- 33

Safety Spectacles for the Color-Blind by V. A. Chapman, M.D., Milwaukee ---------- 35

Cataract Extractions: Report of 108 Intracapsular and 47 Extracapsular by E. E. Carl, M.D., Milwaukee ---------- 37

Toxic Pruritus Secondary to Chronic Nephritis by Maurice J. Reuter, M.D., Milwaukee -------- 38

EDITORIALS

Page

Use and Abuse of Iodine in Treatment of Goiter 40

Edema ---------- 41

MISCELLANEOUS

Society Proceedings ---------- 43

News Items and Personals ---------- 45

Births, Marriages, Deaths ---------- 46

Society Records ---------- 47

Correspondence ---------- 47

Examiners Appointed ---------- 47

The Woman's Auxiliary ---------- 48

Income Tax Provisions Affecting the Medical Profession. I. Federal ---------- 51
II. State ---------- 55

Books Received for Review ---------- 64

Book Reviews ---------- 64

Exchange Ads ---------- 71

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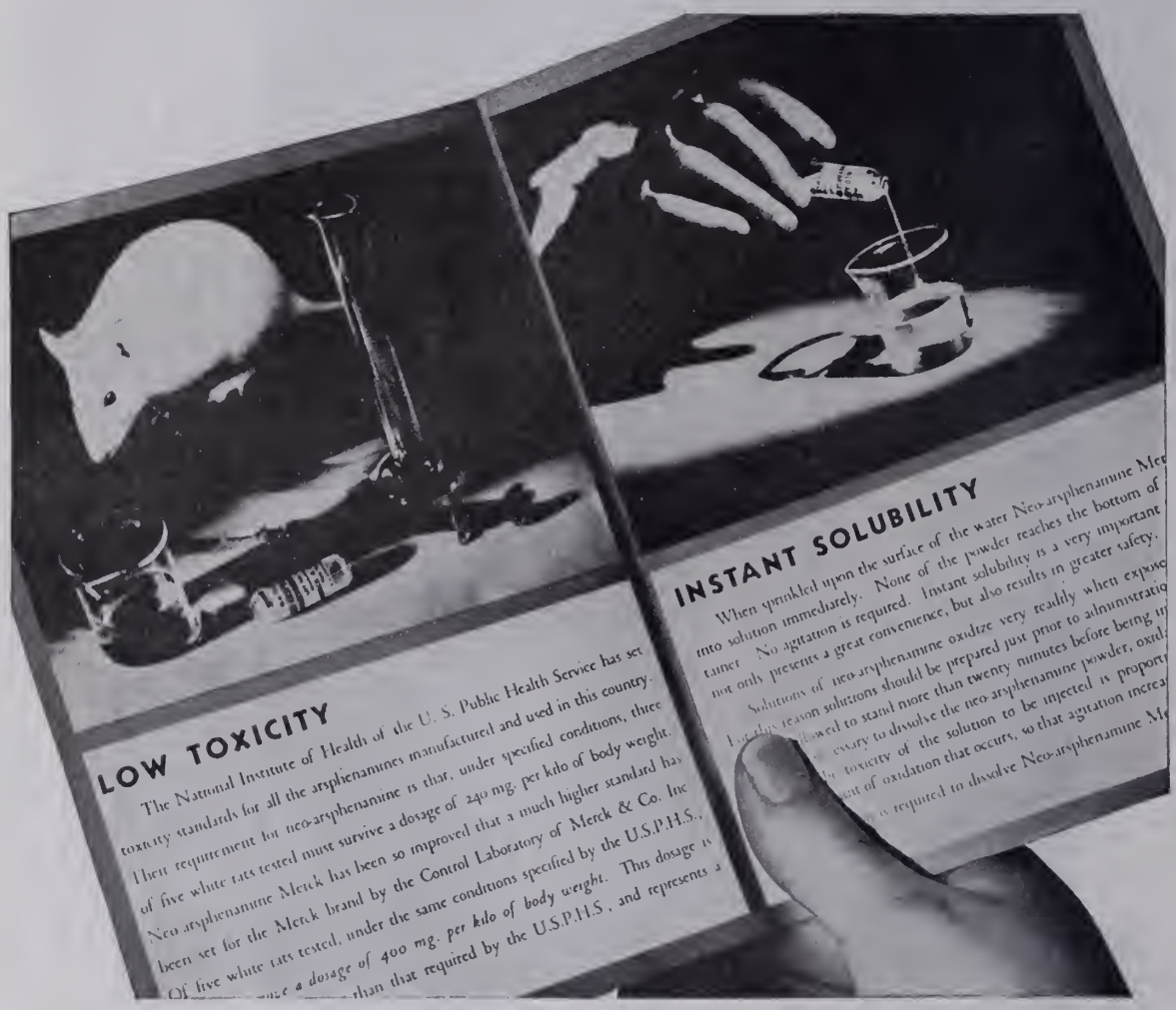

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Volume XXXIV JANUARY, 1935 Number 1

Open Reduction Treatment of Fractures*

By JAMES A. JACKSON, M. D.
The Jackson Clinic, Madison

THE greatest achievement of the industrial surgeon is to return a patient to work fully able to carry on the duties of his former occupation with minimum disability in as short a space of time as is consistent with his health and well-being.

It is my opinion that in no other surgical field is there a wider range of good, bad, or indifferent results than in the treatment of fractures.

I think you will agree with me that in spite of the best possible intentions on the part of attending surgeons, there are still far too many unsatisfactory and disappointing end results. How can this relatively high incidence be lessened?

Despite the adverse criticism which has been voiced by many during recent years against the open method, I am firmly convinced from my own experience,—based on many active years of industrial surgery,—that the ideal end result which I mentioned in my opening statement can be attained more often, more rapidly, and with far greater assurance of success in certain fractures by the open reduction and internal fixation method than by any other means. By this statement I do not mean that all or anywhere near all fractures should be operated upon. My own figures show that about 17 per cent of my fractures are treated by the open method.

To do this work successfully and avoid infection, one must have the proper armamentarium, technic, and specially trained assistants and nurses. When these conditions are impossible to obtain, it is far better to treat fractures by one of the many excellent methods of closed reduction. Most disasters which occur after open reduction are due to faulty technic and not to the method. As a matter of fact, with ideal conditions infections following this type of work are much less apt to occur than in the general run of cases in other surgical fields. This is due to the far more elaborate asepsis and perfect technic attained. Sherman[1] in more than 1500 cases of open reduction found infection no more frequent than in any elective operation. He repeatedly emphasizes the necessity of correct technic.

Quoting Scudder[2] "The aseptic regimen of general surgery makes possible the treatment of fractures by operative methods. In such fracture treatment today, the danger of sepsis is practically eliminated. A rigid conformity to the established aseptic regimen is essential to success and is postulated in this argument. The treatment of fractures by operation stands today on a fundamentally sound and safe basis."

The general term "good functional results" as applied to end results in the treatment of fractures should be discarded. It covers too much ground and no longer applies to the work of the industrial surgeon whose results are now graded in percentages of permanent disability. The problem is to obtain the best possible anatomical result in the least possible time so that the economic loss shall be at a minimum. Again quoting Scudder[3] "We must strive more energetically in all our fracture treatment for anatomic perfection. Anatomic reposition is just as necessary in the bony parts as in the soft parts. Anatomic perfection means a nearer approach to functional perfection".

It is the opinion of many leading fracture and orthopedic surgeons, including Sherman, Scudder and Hitzrot, that this end may best be assured in many fractures, especially in certain ones involving the long bones, by open

* Presented before 93rd Anniversary Meeting, State Medical Society, Green Bay, September, 1934.

Fig. 1. Spiral Fracture, right humerus.

No. 51635, H. B., Spring Green, Wis., age 19, admitted to Methodist Hospital Jan. 4, 1927.

History: Auto accident 4 days previous to admission. Fracture right humerus; attempted reduction unsuccessful. Referred to my service at the Methodist Hospital. X-rays show spiral fracture lower third of right humerus with considerable displacement of fragments.

Treatment: Jan. 10, 1927, open reduction, two Martin Parham Bands applied. Wound healed primary intention, discharged from Hospital January 24, 1927. On this date x-rays show perfect reduction and alignment of fragments. Continue physiotherapy treatments.

February 3, 1927, full flexion and extension elbow. Discard sling, continue physiotherapy.

Feb. 18, 1927, case discharged—cured.

reduction. The desirability of an anatomic reposition, we are told by Scudder,[4] more and more frequently calls for the direct operative approach.

With the large monetary verdicts given in industrial and civil courts today, it has become more and more important that the results in fracture cases should approach as near perfect anatomical reduction and alignment of fragments as possible. Nature does a wonderful piece of repair work in mending broken bones but she did not contemplate the zeal of hostile lawyers and the social generosity of a jury prone to give the plaintiff the breaks against a rich (?) corporation in cases where such a combination happens to sit in judgment on her efforts.

Sherman[5] states that in a large series of cases of fracture of the shaft of the femur treated by him by the open method of reduction no monies have been paid for loss of function and disability and all of the injured have returned to their occupations in steel mills and coal mines. This statement should surely interest the compensation insurance companies.

A survey of the records from an industrial court in fracture cases would show many permanent and costly disabilities which, had the fractures been properly treated, could have been avoided. Such a survey might open the eyes of those corporations that have to pay the bills and that have issued edicts that absolutely none of their fracture cases are to be treated by open operation and internal fixation.

The imperative technic which at first may appear quite complicated can be acquired by a good conscientious general surgeon and then taught to his operating staff. Such work should never be done in a strange operating room with assistants and nurses who are not familiar with the detail required in this type of work.

Contrary to the often expressed opinion that metallic screws and plates retard or inhibit callus formation and consequent union, it is my opinion that they further union due to the fact that much less external splinting is required. This allows much earlier and more vigorous and stimulating physiotherapy measures to be applied which unquestionably improve the circulation in the soft parts and, also, through earlier manipulation of the joints, prevents stiffening and ankylosis.

To avoid undesirable atrophy of anatomical structures, the minimum of plaster encasements should be used in fracture cases. What will better insure this minimum than to start with a broken bone that has already been made mechanically solid by the application of an internal splint?

TECHNIC

I wish first to call your attention to the use of spinal anesthesia in the open as well as in the closed reduction of fractures of the

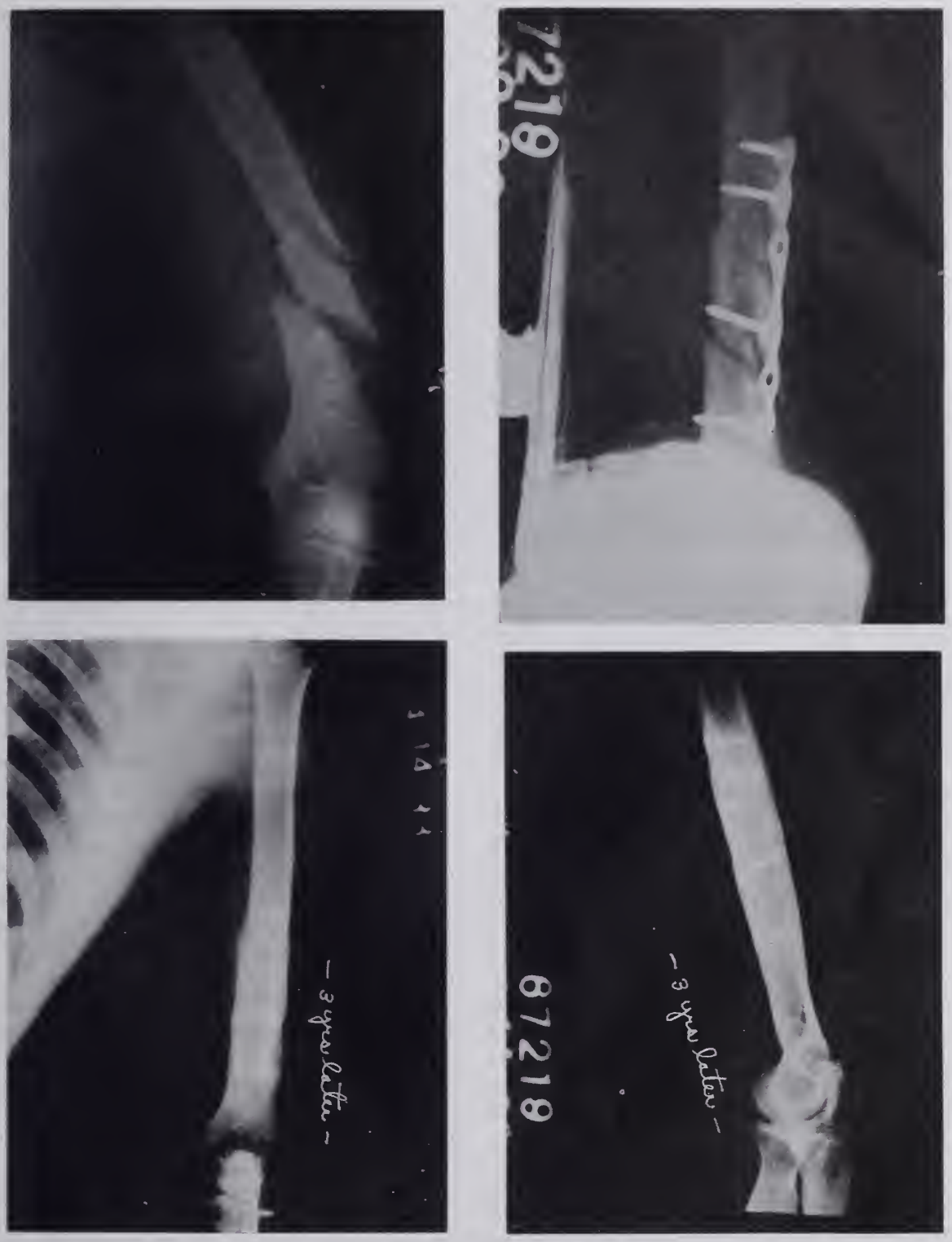

Fig. 2. Multiple fracture, left humerus.

No. 67219—L. W., Madison, Wis., male, age 29, admitted to Methodist Hospital August 1, 1930.

History: Automobile accident, brought direct to hospital.

X-ray examination, left humerus: Multiple fracture lower third of left humerus.

Treatment: Extension treatment did not hold fragments in apposition; marked swelling and reaction of soft parts.

August 16, 1930, open reduction, application of Sherman plate with transfixion screws. Wound healed by primary intention. Patient put on physiotherapy treatments. Discharged from hospital Sept. 23, 1930, seven weeks after injury.

Postoperative x-ray: fragments held in good position.

X-ray three years later, perfect alignment solid bony union. Plate giving no trouble; not removed.

Fig. 3. Comminuted intertrochanteric fracture left femur.

No. 66619, F. V., F. age 24, admitted to Methodist Hospital June 16, 1930.

History: Thrown from horse May 31, 1930. Comminuted intertrochanteric fracture left femur. Thomas hip splint had been applied. Pressure from the ring had caused necrosis of skin encircling two-thirds of limb.

Treatment: On June 30, 1930, one month after fracture and two weeks after coming on my service, the pressure slough in the skin having been previously carefully prepared and sealed off, an open reduction and application of two Martin Parham bands was performed. Put up in single plaster spica cast. Wound healed with primary intention. Uneventful convalescence.

Last x-ray, August 1934, bands still in situ. Perfect union and alignment of fragments.

lower extremities. Complete relaxation of the soft parts—so necessary to the successful reduction of fractures — is more nearly approached under spinal block than by any other form of anesthesia. By the preliminary injection of ephedrine in conjunction with spinal anesthesia we are able to stabilize the blood pressure and thus avoid the severe shock which so often accompanies strenuous and repeated manipulation of such bones as the femur and tibia. We have used spinal anesthesia in our Clinic in several thousand general surgical patients without a death which could in any way be attributed to the anesthetic.

Let me repeat most emphatically, no patient should be operated upon in the absence of a properly trained operating room staff and the necessary mechanical armamentarium for repair work.

Fractures suitable to open operation that have received a minimum of trauma to the soft parts may be operated on in the first twenty-four hours.

Simple fractures that have received considerable trauma with marked swelling and reaction in the soft parts or abrasions of the skin are shaved, cleaned up and put at rest with ice bags applied and are kept as quiet as possible for from ten to twelve days before operation. If operated on during the stage of reaction, they are quite prone to become infected.

May I interject that it is a mistake to say that you will take a patient to the operating room and attempt a closed reduction and if this is unsuccessful, you will go ahead with an open reduction. These patients must have a proper period of rest and most careful preoperative preparation.

On or about the tenth day after the injury was received, the extremity is thoroughly cleaned with alcohol and ether and a 3 per cent coating of iodine is applied. The iodine, after drying for five minutes, is washed off with alcohol and a sterile dressing applied. On the following day the limb is given another coating of iodine, dried, washed off and

the sterile dressing reapplied. On the morning of the operation a final washing with alcohol and a last coat of iodine.

Instead of the rigid and rather cumbersome Lane technic which I formerly used, I have for the last eight years adopted the method innovated by Sherman which is equally successful in avoiding infection and infinitely more simple to carry out. Two large, deep oblong utensils—one filled with 0.5 per cent sodium hypochlorite solution, the other with sterile water — are placed in juxtaposition convenient to the operator and his first assistant. When an instrument has been used, it is dropped directly into the pan of Dakin's solution. It is allowed to remain there a few moments, the nurse then transferring it with a sterile forceps to the sterile water, rinsing it and placing it on the sterile instrument table. When an instrument is required it is passed to the surgeon through the medium of a sterile forceps only, the points of the instrument never being touched by a hand. The sponges are small and once used are discarded.

Incisions are made with the radio knife, skin edges slightly undermined to allow the towel clips to obtain a good grip. All the skin surrounding the incision is then accurately covered with towels. The bleeding points are stopped with the coagulating current, catgut being used to ligate only the larger vessels, the tying being done by forceps. No finger enters the wound. Approach to the bone is made as nearly as possible along the fascial planes with as little trauma to the soft parts as is commensurate with a good exposure of the fracture. It may be necessary at this stage to curet the bone ends, removing any muscle or fibrous tissue that may be present. With the aid of my flexible bone clamp I am usually able to reduce the fracture accurately and quickly, an assistant meanwhile holding the extremity in the proper anatomical position.

The fracture being reduced, it should be firmly fixed by the internal splint which best fulfills the mechanical requirement. It is not only poor surgery to leave out the internal splint but a reflection on the surgeon's confidence in his asepsis. Malalignment of the fragments after operation is humiliating to explain, especially when the surgeon realizes it was due to the omission of the internal splint. If the fracture is transverse, the proper Sherman plate is chosen, drill holes (gauge 32 drill) are made,—two or three on either side of the fracture—and from two to four of the screws used should be of the transfixion type. This is especially important in fractures of the femur where bowing is prone to occur. When the fracture is oblique, transfixion screws alone may suffice or two Martin Parham bands may be necessary. I never use ox bone plates, ivory pegs,

Fig. 4. Multiple fracture, left femur.

No. 55940, E.B.R., Madison, Wis., male, age 45, admitted to the Methodist Hospital December 20, 1927.

History: Automobile accident, multiple fracture left femur, severe shock; brought in by ambulance; no splint. Limb put up in Thomas hip splint extension. Severe reaction in soft parts; marked swelling.

Treatment: Jan. 6, 1928, 17 days after fracture, open reduction was done. Both ends of 10″ section of fractured femur plated to shaft with heavy Sherman plates and transfixion screws. Discharged from Hospital on crutches, Mar. 20, 1928, three months from day of admission.

April 26, 1928, discharged from my service to return to work as foreman of Auto Tire Sales plant, slightly more than four months from date of fracture.

Perfect anatomical and functional result. No claim or money paid for permanent disability. This patient was under the compensation law.

Fig. 5. Comminuted fracture, right tibia and fibula.

No. 35012. J. R., Richland Center, Wis., male child age 11, admitted to Madison General Hospital April 8, 1923.

History: On the day previous to admission, slipped and fell breaking both bones of right leg lower third. Referred to my service.

X-Ray: Comminuted fracture, lower third, right tibia and fibula.

Treatment: Two unsuccessful attempts at closed reduction. On April 21, 1923, fourteen days after fracture, open reduction was done. Single Martin Parham band held fragments of tibia in perfect position and alignment.

May 12, 1923, Discharged from Hospital, wound healed, patient on crutches and referred to home doctor.
October 16, 1923, Martin Parham band removed.

or dowels; they are just as much a foreign body as steel, are brittle and may very easily be broken, especially where little external splinting is used.

Skin wounds are closed accurately but not too tightly with continuous and, here and there, an interrupted dermal suture. A dressing wet with alcohol is put on and the external splint or cast is next applied. Dressings are done and the stitches removed on or about the eighth day. Early mobilization of the joints with massage and active motion is instituted within ten days. Metal applied to bones which are directly beneath the skin, such as the tibia or clavicle, should be removed when it has served its purpose; that which is buried deeply beneath the muscles may be allowed to remain.

Compound fractures on which it is decided to operate should be taken to the operating room immediately unless in great shock. A complete debridement of the macerated and torn parts is performed, the bone ends approximated and held in position by screws, plates or bands, Carrel–Dakin's tubes inserted and the wound left fairly open. The metal should be removed usually about the sixth week when the wound is healing and the granulations are in healthy condition. In a series of 304 cases of compound fractures of the long bones reported by Dr. Foster[6] it is shown that the accurate open reduction and plating of a compound fracture in addition to the use of the Carrel–Dakin method of wound sterilization to the wide open wound tends toward rapid union without infection, rather than toward infection, nonunion, septicemia, amputation, or death.

I wish to repeat to the surgeon who will conscientiously carry out this technic, there is little to fear and much to gain in end results and in cutting down hospital days by treating certain cases of fracture by the described method. When I consider the frequently prolonged disability and numerous instances of non or delayed union from the

Fig. 6. Compound comminuted fracture, both bones right leg.

No. 72727, N. T., M. age 78, railroad flagman, Madison, Wis., admitted to Methodist Hospital Jan. 6, 1932.

History: Struck by auto, brought in by ambulance, no retention splint, severe shock, extensive lacerated wound of right leg with compound comminuted fracture of both bones middle third right leg.

Treatment: Referred directly to operating room, treated for shock. Complete debridement of wound, fracture of tibia plated, Carrel–Dakin's treatment instituted. Wound responded nicely. Mar. 1, 1932, about seven weeks after injury, plate removed from tibia.

April 19, 1932, 3½ months from date of injury, patient discharged from hospital; wound practically healed; union taking place.

April, 1933—One year later, fracture perfectly united, good position, walks without a limp.

use of the Kirschner wire in the hands of some of our best fracture surgeons, I feel more and more content with the open treatment of certain fractures.

I would not have you believe from what I have said that my own results have been 100 per cent perfect. In a series of some 250 open operations on simple fractures covering a period of 22 years' work, I have had four serious infections which I shall enumerate.

No. 1. Male adult, oblique fracture, upper third femur. Strange operating room, assistants and nurses entirely unfamiliar with "no touch" technic. Dressing done on fourth day, wound flooded with pus. Stitches removed, wound flushed with hypochlorite solution, Carrel–Dakin's treatment instituted. Wound cleaned up nicely. The two Martin Parham bands which had been inserted were removed at the sixth week. The wound healed without undue delay and the fracture united in perfect position. Fortunately, this case turned out better than could have been expected. Moral: Do not operate fracture cases in strange operating rooms.

Nos. 2 and 3. Frail and debilitated old ladies. One, a nonunion in a T fracture lower end of femur. Difficult and prolonged operation, developed infection involving knee joint. Death.

The other, an intracapsular fracture of the neck of the femur. Smith–Peterson operation with nail. Developed carbuncle in buttock, low resistance, infection finally led to site of fracture. Patient eventually died. Moral: Do not attempt open reduction on poor surgical risk.

No. 4. Child, 12 years. Fracture neck of femur. Open reduction, autogenous bone dowel. Case came to operating room improperly prepared. Infection followed; death ensued. Moral: Postpone open operations on fractures where the patient has not had the proper preliminary preparation.

Sherman has probably done as much as any other man to further the successful treatment of fractures by the method of open reduction initiated by Lane. Grateful acknowledgment is made to him for his courteous helpfulness and aid in furthering our experience in this method and for suggestions regarding postoperative care.

SUMMARY

Based on an experience of many years as an industrial surgeon, embracing the treatment of some 1500 patients afflicted with fractures, the author is firmly convinced that in certain instances the desired end result of

1. Correct anatomical alignment of fragments
2. Maximum return of function
3. Minimum economic loss

will best be assured through the open reduction and internal splinting method than by

Fig. 7. Compound fracture of right femur.

No. 76066, L. B., Marshall, Wis., M. age 83, admitted to Methodist Hospital Jan. 24, 1933, two hours after injury.

History: Kicked by a horse and received a compound fracture of the middle third of the right femur.

Treatment: Patient taken directly to the operating room. Inasmuch as there was no great amount of shock, an immediate but moderate debridement of the wound was performed. The fracture was reduced and a Sherman plate with transfixion screws applied. The wound was flushed with Dakin's solution and primarily closed. The limb was put up with swing splint. Wound healed by primary intention. Physiotherapy was started ten days after operation.

The patient was discharged from the Hospital on March 8, 1933, six weeks after injury.

X-ray plates showed perfect reduction and alignment of fragments.

any other. Emphatic disapproval is voiced against the general surgeon entering this field without a most conscientious and successful effort on his part to master at first hand the absolutely essential knowledge and technical training demanded. Moreover, he feels it is imperative that operations of this type should be performed only in operating rooms

1. Which are properly equipped and maintained
2. Wherein the surgeon is assured beyond any question of the utmost sympathetic and understanding co-

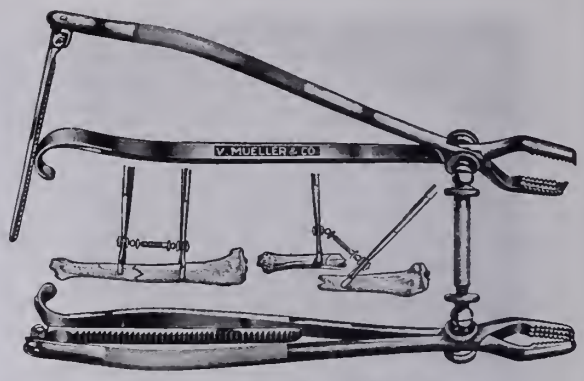

Fig. 8. Author's Bone Clamp.

operation of every assistant and nurse
3. Whose whole atmosphere during the performance of an open reduction gives the impression of a veritable ritual in its effort to maintain the perfect aseptic and antiseptic technic which insures avoidance of infection.

The author by no means advocates the open reduction of fractures which can be treated by a closed method with reasonable expectation of a satisfactory end result but when it is apparent that this will not follow he does not hesitate to use the open method.

Having reduced a fracture by the open method, he believes it is always better surgery to maintain the corrected position by the use of the internal splint. He uses metal for internal splinting in preference to ox bone plates or dowels.

He also resorts to this method in certain compound fractures admitted promptly after receipt of injury. After debridement and internal fixation, the wound is left fairly open and Carrel–Dakin's treatment instituted. The internal splint is removed on or about the sixth week when it has served its purpose of holding the fragments in alignment until bony union is progressing satisfactorily.

In his fracture series he has resorted to the open method in approximately 17 per cent of instances.

A strong plea is made for the use of spinal anesthesia in the treatment of fractures of the lower extremities.

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Scarlet Fever

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THE purpose of this paper is to crystallize the present information regarding a most treacherous disease which has often been reviewed but with no practical benefit to the general practitioner. During the past ten years, 1923 to 1933 inclusive, I have been privileged to take care of 5742 cases of scarlet fever at the South View Hospital, (Isolation hospital of the city of Milwaukee), and I would like to present several tables attempting to re-emphasize and also to clear up a few questionable factors in the diagnosis and treatment of this disease.

There are many old arbitrary regulations governing the control of scarlet fever. For example: The rule making the period of quarantine dependent upon desquamation and permitting health officers to decide whether the patient is free of the contagion on that basis. These laws and regulations were formerly used because very little was known of the positive source of infection, nor of the discovery of carriers in Scarlet Fever. Today, the many doors of information that have been thrown wide open in this disease permit correlating the etiology with subsequent findings and establishing their relationship to the control of this ailment.

The literature is sprinkled with investigations attempting to prove the causative agent. The most outstanding research was presented by the Dicks[1] in 1924, proving the cause of scarlet fever to be a streptococcus. Many others, Rossiwall[2] and Schick, Dochez[3], Tunnicliff[4], Boente[5], Zlatgoroff[6], and Martelli[7], proved practically the same relationship of the streptococcus to scarlet fever. Since the streptococcus has been accepted as the infective agent in scarlet fever, biological tests for susceptibility as presented by Dick[8], Zingher[9], Edwards[10]; blanching and serologic tests by Schultz–Charlton[11], Mair[12], Langer[13], and specific serums for treatment have appeared. These findings permitted public health authorities to resort to throat culturing and laboratory tests for preventive measures, and also for the release of quarantine cases.

From a practical viewpoint the value of the above research depends upon the benefit to the general practitioner in his every-day work.

Knowing that scarlet fever is caused by a streptococcus, one can understand that many acute cases of angina during an epidemic which do not have the necessary clinical triad of sore throat, rash, and strawberry tongue, are still scarlet fever cases and are subject to bacteriologic, biologic and serologic tests for communicable diseases. With the accepted findings of the Dicks and the knowledge that the toxin given hypodermatically can produce the scarlet rash, strawberry tongue, enanthem, and the acute gastralgia, we can conclude that the clinical picture is dependent upon the amount of toxin absorbed, (or toxallergin of Dochez[14]). If a case has exaggerated focal symptoms and very little toxic manifestations, we are certain that the amount of toxin in the body tissues cannot bring out a text-book picture of scarlet fever. Another case may have very little complaint of a sore throat and yet present a severe toxic syndrome with a variance of severity proportionate to the amount of toxin in the tissues. Therefore, in classifying the 5742 cases, I have taken the privilege of using the following

CLINICAL CLASSIFICATIONS

1. The acute fulminating case is an overwhelming septotoxic affair.
2. The severe scarlatina anginosa, i.e., extreme amount of exudate present in the

fauces simulating a diphtheritic appearance with a high fever curve and its accompanying accessory sinus involvement.

3. The toxic case has the usual circumoral pallor, gastroenteritis, joint pains, and exaggerated punctiform rash, most pronounced in the folds of the body.
4. Mild cases with nothing outstanding in the form of septic or toxic manifestations and the subjective and objective findings of such a character as to merit purely palliative and symptomatic treatment.
5. The traumatic and surgical cases.

There is still another group of cases that were formerly spoken of as recrudescent, but which we have concluded occur in types of individuals who lose their antibodies during convalesence and are self-infecting, showing the reappearance of the entire triad of this disease.

TABLE 1

PART 1—CLINICAL TYPES OF CASES

1. Malignant	10	.17%
2. Septic	318	5.5 %
3. Toxic	569	9.9 %
4. Mild	4764	83.0 %
5. Without Rash	81	1.4 %
Total	5742	100.0 %

PART 2—SYMPTOMS

1. Sore Throats		
a. Severe	1115	19.42%
b. Mild	4627	80.58%
2. Vomiting	1373	24.0 %
3. Strawberry Tongue	4052	71.0 %
4. Desquamation	4278	74.5 %

Of the 5742 cases, Table No. 1 shows the largest percentage, 4764 or 83% classified as mild scarlet. I call these cases mild because they were brought into the hospital offering very little complaint and having only objective findings. These were sufficient for a diagnosis, but the cases could not be called toxic nor septic. The toxic cases were 569 or 9.9%, and the septic cases 318 or 5.5%. The malignant types, numbering 10 or .17% died shortly after entrance. This percentage is indeed very small and agrees with the general impression that in the last twenty-five years the scarlet fever mortality has shown a marked downward trend. However, anyone familiar with this disease, knows that the many mild cases of scarlet fever and comparatively low death rates do not wipe out the still existing grave complications and sequelae of this treacherous ailment. Testimonials from all authorities can be elaborated upon in their statistics on sinusitis, otitis media, mastoiditis, cardiac and nephritic complications, and puerperal and associated chronic septic entities. It is true that the originally mild case may present a very severe picture during convalescence. The damage done by scarlet fever is not limited to the severe case but often occurs in an overlooked or mild case.

Further examination of the charts shows 4311 cases or 75% with a rash on entrance. 4052 cases or 71% had a strawberry tongue on entrance or a few days later. 1373 cases or 24% gave a history of vomiting. This symptom, we assume, is a part of the toxemia of scarlet. 1788 cases or 31% showed a definite rhinorrhea. This finding is very important in regard to the persistence of the contagion in a given individual. The rhinorrhea with its resultant peripheral alae ulcerations, anterior vestibule infections, turbinate and parasinusitis involvement occurs in the main portal for harboring, growing and distributing the causative agent.

During the convalescence, the perlèche was observed in 977 cases or 17%. This ulceration at the angles of the mouth is next to the rhinorrhea the chief offender in communicability in a number of cases supposedly recovered.

The accessory sinus involvements were comparatively few in number, but those cases always required more energetic medical and surgical therapy. The next series of complications that one is concerned about in the care of scarlet fever is otitis media, we noted 713 cases or 12.41%, with 495 spontaneous discharging ears or 8.62% and 218 requiring paracentesis or 3.79%. There were 60 active acute cases of mastoiditis or 1.05%, with a total of 35 operative cases or .61%. Interestingly enough, the mastoiditides were simple to diagnose, and only one death resulted with a development of a septicemia. Polyar-

TABLE 2

COMPLICATIONS

1. Cervical Adenitis		
a. Non-suppurative	1209	21.0 %
b. Suppurative	78	1.35%
2. Rhinorrhea	1788	31.0 %
3. Perlèche	977	17.0 %
4. Sinusitis		
a. Ethmoidal	48	.83%
b. Sphenoidal	4	.07%
5. Paratonsillar Abscess	36	.63%
6. Recurrent Rash	100	1.74%
7. Arthritis		
a. Simple synovitis	38	.66%
b. Polyarthritis	256	4.5 %
8. Otitis Media		
a. Spontaneous rupture of membrane	495	8.62%
b. Paracentesis	218	3.79%
1. Unilateral	504	8.77%
2. Bilateral	209	3.64%
c. Mastoiditis	60	1.05%
1. Operative	35	.61%
2. Non-Operative	25	.43%
9. Acute Glomerulonephritis		
a. First Week	9	.15%
b. Second Week	33	.6%
c. Third Week	39	.68%
10. Heart	147	2.53%
11. Lungs		
a. Pneumonia	52	.9 %
b. Pleurisy	25	.43%
12. Abdominal		
a. Gall Bladder	11	.19%
b. Appendicitis	7	.12%

thritis with particular involvement of the small bones, practically all cases occurring during the second week of convalescence, totaled 294 cases or 5.1%. The cases of acute toxic hemorrhagic glomerulonephritis totaled 81 or 1.4%. The chart record shows the usual distribution in time, i.e., the majority of cases occurred between the fourteenth and twenty-first day. It is agreed that this is the most serious complication occurring from the second to the third week. The total number of deaths was 50 or .87%, which is comparatively small when one considers that the formerly accepted figure was from 1% to 10%. This finding emphasizes a previous statement that scarlet fever appears to be of a less virulent character and explains the low mortality rate.

The subject of serum therapy previous to 1924 was a matter of personal judgment in the use of a convalescent serum, or a polyvalent streptococcus antitoxin. Since that date a commercial, concentrated, refined antitoxin, convalescent serum and specific immuno-transfusions have occupied a vital position in the treatment of scarlet fever. Numerous investigators have commented on the role of serum in the treatment of scarlet fever—Sauer[15], Platou[16], Elkeles[17], Bauer[18], Tuck[19], Joslin[20], Veldee[21], Stewart[22], Hunt[23], Tsuda[24], Teichmann[25], Sinclaire[26]. Since 1925 to the present date of the series of cases recorded, we have used antitoxin 416 times or in 7.2%. Some cases required serum intravenously and intramuscularly, whereas the majority of cases responded to the intramuscular injection only. It has been our experience that when a case is definitely toxic, showing a mouth temperature of 102° or more, characterized by gastro-intestinal symptoms and a marked rash, one therapeutic dose, (antitoxin neutralizing 300,000 skin test toxin doses) was not sufficient and we always resorted to two therapeutic doses. Six cases of a severe septic character were given blood transfusions from patients that had convalesced within a period of ninety days. These patients showed evidences of marked sinus sepsis with usually some meningeal irritation. It was necessary in two patients, during convalescence, where no serum had been given during the acute stage, to resort to immuno-transfusions after the development of severe septic findings.

Relative to the 7.2% or 416 cases that received antitoxin, it might be stated that the 83% of mild scarlet fever cases would not justify the promiscuous use of antitoxin. The small percentage of complications that occurred caused the conservative attitude toward the use of the serums. It is only in the toxic cases that I would recommend the use of antitoxin, and in the severe septic cases immuno-transfusion is superior to any other method of treatment. Knowing that many mild cases of scarlet fever may present severe complications, this attitude toward serum is open to criticism concerning the prevention of these complications. But, with the knowledge of the causative agent of the disease and a keener understanding regarding the care of the usual foci of infection,

I believe this conservative attitude is justified.

To evaluate the three chief methods of treatment, one must necessarily appreciate the clinical severity of the ailment at its onset. The mild type of case can be left for symptomatic treatment. The case exhibiting a toxic syndrome responds better to the use of antitoxins. The so-called severe septic type responds best to the use of immuno-transfusions. Successful management of any case means the use of antitoxin, convalescent serum, or whole blood when the seriousness of the infection requires it. The availability in general practice of a recent convalescent does not always exist, therefore, the only substitute would be a non-specific immuno-transfusion and the use of antitoxin. Antitoxin in mild cases, when used indiscriminately, has lessened the complications to such a slight degree that we have discarded its use as a routine measure. Selected cases are given large doses of the antitoxin serum. Reactions occurred in approximately 25% of our cases. That is one of the reasons why we hesitate to inject antitoxin in the very mild cases.

TABLE 3

1. Blanching Tests:		
a. Negative	971	63.22%
b. Positive	565	36.78%
2. Dick Tests:		
a. On Entrance Negative	2328	82.7 %
b. On Entrance Positive	484	17.3 %
3. Fourth Week Release Throat Cultures		
a. Negative	2675	88.9 %
b. Positive	331	11.1 %

Dick tests are now done routinely on entrance of all cases to the hospital; also, blanching tests, where a rash is still present. Out of 2912 cases, 2328 were negative and 484 positive to the Dick test. Of the 484 positive on entrance, ten days later 128 were still positive and twenty days after admission 46 remained positive. This observation would imply that the majority of scarlet fever cases develop a negative Dick test within a few days after the onset of the ailment. Hence, this biologic test cannot be considered a reliable measure to decide if a given case is resultant from the streptococcus of scarlet fever. In the final analysis the clinical picture remains the deciding factor in making a positive diagnosis. Blanching tests (Schultz–Charlton reaction) were done in 1536 cases—971 were negative, 565 were positive. This biologic toxin antitoxin phenomenon is only diagnostic when positive and the same conclusion must be reached concerning the value of the Dick test. It is merely a corroborative finding and should be given the same interpretation as the Wassermann test in syphilis.

As to the frequency of desquamation, 74½% of cases showed peeling during convalescence. We know that it is not necessary for scarlet fever cases to desquamate. The old impression that they must peel is erroneous and should be discarded. Desquamation as a contagious element may safely be disregarded.

SUMMARY

In reviewing 5742 cases of scarlet fever, several tables have been presented for the purpose of showing the usual number of complications and their percentages. With the advent of serum therapy as a specific, we attempted to support the diagnosis with the throat cultures and the Schultz–Charlton test (blanching test) and to administer the available specific antitoxin.

In following through our cases of scarlet fever, it was a general observation that the use of antitoxin in certain clinical types of cases was justified by the remarkable recovery occurring, but in the general use of the antitoxin we felt that there was no marked change in the percentage of complications. This observation being particularly true of the mild cases, it had no bearing on the time element of recovery nor in ameliorating the expected degree of sequelae. Due to this conclusion, we felt it best to resort to antitoxin only in warranted cases. We are certain that the administration of serum in all cases entering a fever hospital would not be justified as a scientific measure followed by therapeutic benefits. The majority of mild cases should receive palliative and symptomatic attention. His own antibodies can well care for the type of streptococcus invading the patient. Incidentally, an added phase of serum therapy is that of the economic consideration in ordinary cases. Border-line cases, how-

ever, and those with the toxic or septic syndrome, should be given antitoxin.

No added comment is necessary on the lesser percentages of complications as noted in the tables. They are included to complete the findings in this series of cases.

CONCLUSIONS

Interpretation of the records in 5742 cases were:

1. The majority or 83% of mild cases necessitated no different treatment than that in use during the era previous to the advent of serums.
2. There were 416 or 7.2% of toxic cases that received from 300,000 to 600,000 antitoxin units of the antitoxin, showing a satisfactory course of convalescence with very few complications.
3. Severe septic cases and those showing serious complications during treatment are best treated with immuno-transfusions.
4. The mild cases under careful management very rarely exhibited serious complications during convalescence.
5. All cases on entrance were cultured for hemolytic streptococci, and it was observed that practically all cases had negative cultures by the end of the fourth week.
6. Desquamation of the body, hands and feet, at the end of twenty-eight days was considered of no relation to the contagion, if the mucous membranes were negative and no complications were present.
7. A positive blanching test corroborates the diagnosis but a negative test in the face of positive clinical findings does not refute the diagnosis.

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COMPLICATIONS OF PEPTIC ULCER: THEIR PROGNOSTIC SIGNIFICANCE

Sara M. Jordan and Everett D. Kiefer, (Journal A. M. A., Dec. 29, 1934), state that obstruction, hemorrhage and intolerance to alkalis are complications that influence prognosis in the medical management of duodenal ulcer. Obstruction of all degrees in the group of seventy-nine cases that they studied was relieved in 89 per cent by medical management. It recurred later in 13 per cent. Obstruction, hemorrhage and intolerance to alkalis were all unfavorable factors in the medical management of the disease. Single hemorrhage had the least effect on prognosis; obstruction was next in its unfavorable influence; multiple hemorrhage and intolerance to alkalis had the most harmful effect on the later course of the disease.

Diagnostic and Therapeutic Considerations in the Management of Acute Intestinal Obstruction*

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WHEN a patient presents himself for treatment of an acute abdominal disorder, the accuracy with which the lesion is recognized determines in large degree the eventual outcome. Dilatory measures and seeming improvement have brought the lives of many patients to an unhappy ending. At the same time, too active an interference at an inopportune time or when it was not indicated also carries its hazards for the patient. At one time, it was considered quite proper to open the abdomen whenever the presence of an acute lesion of any type within the abdomen was suspected and operations for "acute abdomen" were the order of the day. This dictum that an acute abdominal disorder meant exploratory operation to determine the nature of the lesion frequently lent the impression that many of the preoperative deliberations were purely philosophic exercises productive of little good. A natural consequence of this appraisal contributed also to the feeling that the corrective measures employed by the surgeon were largely responsible for the patient's recovery.

It is so natural to conclude that the patient got well because of what was done; and if he succumbed, it was because of the nature of his illness. Now the fallacy of this logic is not difficult to detect. Nevertheless, the physician who deals with disease and its many vagaries is very likely to fall into this pitfall. Rationalization on inadequate or incomplete data is predestined to lead to erroneous conclusions. More critical analysis of what the remedial measures employed actually contributed is sorely needed in all clinical medicine.

The biblical admonition to "Render therefore unto Caesar the things which are Caesar's and unto God the things which are God's" will serve to avoid being misled by the testimony of false prophets. Each therapeutic procedure employed must be critically examined and analyzed to determine its virtues and shortcomings.

It is to be freely conceded that many acute abdominal lesions are difficult of precise recognition. The very word, abdomen, signifies hidden. Still, employing all the criteria of examination at one's disposal, it is surprising how accurate diagnoses may be. When doubt hovers about the exact nature of a lesion, it may be necessary to have recourse to surgical exploration to dispel the uncertainty. No longer, however, is the presence of an acute abdominal lesion a foregone conclusion that surgical intervention is indicated. Acute abdomen is not synonymous with operation. The nature of the majority of acute abdominal ills can be diagnosed correctly without exploration. Whether operation is necessary is to be determined by what operation can accomplish.

The keynote of the art of recognition of disease is *method*. If, in the making of any diagnosis, the physician will put to himself the three following questions and can secure satisfactory answers to the first two, a fairly reliable answer for the final and most important will also probably be reached. (1) What is the functional disturbance present? (2) What is the anatomy of the lesion? (3) What is its pathological nature?

A. IS THE GUT OBSTRUCTED?

1. *What is the functional disturbance?*

The common complaints of patients with bowel obstruction are two: (1) pain, (2) vomiting. To be sure, these complaints are so much a part of all acute abdominal lesions that their occurrence affords no distinguishing characters. The pain of intestinal obstruction is colicky and intermittent. The patient usually correctly identifies it as a "gas pain" and in so doing may minimize its significance and may persuade his physician to the same attitude of mind. As one would

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expect, a patient with a block in the bowel usually has frequent and copious vomiting. Whereas most acute abdominal disorders are attended by vomiting, the regurgitant emesis of obstruction is ordinarily sufficiently distinctive to direct the physician's attention to it. The only obstruction in which vomiting is frequently absent is obstruction of the left colon, in which the ileo-colic sphincter limits the distention to the colon. The small intestine not participating in the distention, there is no regurgitation through the agency of reversed peristalsis into the stomach and vomiting is not infrequently absent altogether. If a duodenal tube is passed into the stomach no retention is found.

I believe it may be laid down as a rule that when vomiting is stercoraceous or fecal in character the obstruction is in the small intestine. I have yet to see a patient with an uncomplicated colonic obstruction with fecal vomiting. On the contrary, a patient presenting a block well down in the small intestine frequently has emeses of fecal-like vomiting. And when a duodenal tube is passed into the stomach, a liberal return is almost invariably obtained in the presence of considerable distention.

In consequence of the interference with the continuity of the intestinal current, distention occurs. Its character and grade are obviously dependent on the duration of the obstruction and whether the latter is complete or not.

Pain, vomiting and distention therefore are the common complaints of a patient with bowel obstruction. The presence of an abnormal mass as in a strangulated hernia, blood in the stool and failure to obtain an evacuation of the bowel are complaints peculiar to certain obstructions.

2. *What is the anatomy of the lesion?*

In the occurrence of intestinal noises heard at the acme of the pain of which the patient complains, the anatomical origin of the pain is established. Only intestinal colic presents this finding. Whereas intestinal borborygmi may be heard with the stethoscope in a number of acute abdominal disorders. In no other abdominal colic does this time relationship of pain and noise occur. The concomitant occurrence of borborygmi and pain establishes the presence of *intestinal colic.*

3. *What is the probable pathologic nature of the lesion?*

Intestinal colic, it is obvious, may be caused by mechanical obstruction of the bowel as well as by other bowel disorders. Food indiscretions now and then give rise to crampy abdominal pain with vomiting. Similarly, in enteritis or colitis, intestinal colic is common. Here, however, the irritative phenomena of which diarrhea is a consequence are unusually prominent. On the basis of the character and progression of the distention, especially as studied by the Roentgen ray, and with a correlation of all the findings, the functional intestinal colics may usually be readily differentiated from those of mechanical intestinal obstruction.

B. HOW IS THE GUT OBSTRUCTED?

As is apparent from the accompanying table, the bowel may become obstructed in a number of ways. From the anatomic standpoint, however, there are but two varieties, (1) interference with the continuity of the bowel, (2) that variety which presents in addition, compromise of the blood flow. These two types are usually described as simple and strangulation obstructions.

SIMPLE OR STRANGULATION OBSTRUCTION?

Clinically these two varieties can be distinguished fairly well by the presence or absence of rebound tenderness. A patient with *intestinal colic* exhibiting no signs of peritoneal irritation has a simple obstruction. Intestinal colic attended by rebound tenderness and rigidity of the abdominal muscles indicates that a potential strangulation is present. The rebound tenderness owes its presence to the sensitivity of the parietal peritoneum, which being irritated by the blood escaping into the peritoneal cavity, in consequence of the arrest of venous return, causes rigidity and tenderness to be elicited on physical examination. An adhesive band which occasions simple interference to the continuity of the gut may give rise to some abdominal tenderness, when that adhesive band is attached to the parietal peritoneum.

TABLE 1—CLASSIFICATION OF TREATMENT OF INTESTINAL OBSTRUCTIONS

Clinical Classification	Pathologic Classification	Treatment
A. Mechanical I. Narrowing of lumen 1. Strictures of bowel wall a. Congenital: Atresia ↓ ↑ Imperforate anus b. Acquired: Inflammatory, Traumatic ↓ ↑ Vascular, Neoplastic 2. Obturation 3. Compression from without (Especially pelvis and retroperitoneal duodenum)	Simple (except in neoplastic strictures of the colon)	Operation, preceded by suction for decompression in late cases except in occlusion of the descending colon
II. Adhesive bands: Congenital, Inflammatory, Traumatic, Neoplastic	Simple or strangulation	Suction, operation for persistent obstruction and in strangulation
III. Hernia 1. External 2. Internal IV. Volvulus V. Intussusception	Strangulation	Early operation
B. Nervous I. Inhibition ileus—(Paralytic) adynamic II. Spastic ileus—Dynamic	Simple	Suction
C. Vascular I. Thrombosis and embolism of mesenteric vessels II. Severance or injury of mesenteric vessels (Operative or blunt trauma)	Strangulation	Early operation

In intussusception, rebound tenderness may be absent because the telescoped gut is within the normal ensheathing cylinder. In the invaginations of infants, however, the other signs such as mass and blood and mucus in the stool serve to detect the character of the obstruction.

Whether the obstruction is complete or not can usually be determined by x-ray examination preceded by the administration of enemas. Gas is normally present throughout the alimentary canal but in the adult it may be visualized on an x-ray film only in the stomach and colon: whereas gas is present in the small intestine, the intimate admixture of gas and fluid owing to its rapid onward movement precludes its demonstration on the Roentgen film. When stasis occurs in the small intestine for whatever reason, gas and fluid separate and gas may be observed to be present in the small intestine. Distention of segments of small intestine with gas therefore indicates intestinal stasis. The stethoscope tells whether it is of inhibitive (paralytic) or mechanical origin. Now, if the patient has had enemas prior to the time that the Roentgen film was taken and there is no gas visible in the gut beyond the distended coils, the obstruction is complete. If on the contrary there is gas beyond, and effectual returns of gas and feces had previously been obtained by enemas, the obstruction is incomplete. In other words, if the nature of the obstruction is such that, following the evacuation of the content of the gut distal to the obstruction, gas continues to filter through the site of obstruction, it will make its appearance on the film. This information is predicated on two facts: (1) The chief source of gas in the intestine is swallowed air. (2) The bowel distal to the obstructoin is functionally as well as anatomically normal and its content may be removed with enemas.

RECOGNITION OF TYPE OF OBSTRUCTION

The exact nature of the obstructing agent and the precise manner in which it obstructs the gut are items upon which our information at best is inferential and not absolute. External hernias; the congenital obstructions such as intestinal atresia and imperforation

of the rectum and anal canal; intussusception of infancy and mechanical obstructions of the left colon may usually be accurately identified by the rather obvious findings or characteristic train of symptoms present. Occasionally functional obstructions with considerable distention of the colon may be confused with obstruction due to carcinoma of the pelvic colon. The greatest difficulty lies in the determination of the exact nature of an obstruction in the small intestine. When strangulated external hernia and invagination of the bowel, which are statistically rather common types of obstruction, are excluded, adhesive obstruction is by all odds the most likely. It is probably the most frequently observed of all varieties of obstruction and concerns almost invariably the small intestine alone. Yet, obstruction of the small bowel by a gallstone, carcinoma of the small intestine, or an enteric intussusception, though uncommon, occur frequently enough to demand attention in the consideration of the probable nature of a small bowel obstruction.

In my experience, one of the most difficult differential diagnoses is to distinguish between a strangulation type of obstruction presenting *intestinal colic* and *rebound tenderness* and an inflammatory lesion which in turn may occasion some interference with the continuity of the gut. The history, the degree of tenderness present and the distribution of gas in the gut often aid materially in differentiating. In those inflammatory lesions, however, in which the obstructing element is such that a complete obstruction exists, I have found it impossible to differentiate. Now this differentiation is not alone a matter of academic interest; moreover it is one of vital concern for the patient. It has been my observation, when one opens the abdomen in the presence of peritonitis where the exudate is also obstructing the gut, that frequently the infection which the patient has been satisfactorily controlling is spread by the operative interference; the barriers of resistance are broken down and the patient dies. It is my earnest conviction borne out by the demonstrated wisdom of conservative management in similar cases that where a strangulation obstruction can be satisfactorily excluded, a non-operative course assumes much less risk for the patient. To be certain, the orthodox plan is to operate upon such patients. It is a momentous decision to make. But is it not better, however, to be less conventional in matters so vital when the life of the patient is at stake?

I have on occasions, when in doubt as to which type of lesion is present in a female patient, made a small slit into the peritoneal cavity behind the cervix. If pus is present, the existence of an inflammatory agent causing also simple obstruction of the gut is indicated; if on the contrary sanguineous fluid exudes, the probabilities are that a strangulation obstruction is present. In the former instances, the conservative plan is followed; in the latter operation is in order.

It perhaps should be related here that blood chemistry values (high non-protein nitrogen; low plasma chlorides, and an increased combining power of the blood for carbon dioxide) are not altered early in obstruction and consequently are of little value in establishing the diagnosis. They only occur with regularity in high obstructions and are usually only observed after the obstruction has been present for about forty-eight hours. The general condition of the patient with early simple obstruction is good. Apart from the pain that he suffers, he does not appear particularly ill. In strangulation obstructions because of the blood loss into the infarcted gut, the pulse may be quickened. Late in obstruction the patient's features usually betray the serious nature of his illness.

C. WHERE IS THE OBSTRUCTION?

The best guide to the location of the obstruction is a Roentgen film made with the patient lying supine. It indicates the grade as well as the location of the distended intestinal coils. In acute obstruction of the left colon, the distention is almost invariably limited to the colon. The exact location of the obstruction in the small intestine cannot be determined with precision. On the whole, however, from a knowledge of the pattern of the coils of the small intestine as described by Mall, one can say fairly definitely whether the obstruction is in the upper, middle or lower thirds.

D. HOW MAY THE OBSTRUCTION BE RELIEVED?

The most direct manner of dealing with mechanical obstruction is to remove the obstructing agent or release the gut from its influence. Experience has shown, however, that in certain instances such an attack is unnecessary and in others unsafe. The choice of therapeutic agent in the relief of the various clinical types of obstruction is indicated in the table (Fig. 1). On the whole it may be said, when operation is in order in early simple obstructions, the surgical ideal of undoing the obstructive mechanism is to be achieved whenever possible. On the contrary, when dealing with late simple intestinal obstructions necessitating operation, decompression of the distended gut by aseptic enterostomy should be done. If the large bowel is concerned, the distended colon must be tapped *aseptically*.

My experience with the performance of "blind enterostomy" in late cases of simple obstruction has been so satisfactory as to warrant a few words in its defense. If one operates early in the course of obstruction, needless to say he will do the operation of election, viz., locate the obstruction, determine its exact nature and undo it. When operating late in obstruction, however, and no sanguineous fluid is present, one can be quite certain that the blood supply of the gut is not in danger. Let us assume that the obstructive mechanism is an adhesive band which blocks the continuity of the gut. Let us assume further that the adhesive band in question is a short tight cord taking origin in the low lateral parietal peritoneum, that it passes over the gut and secures attachment to the mesentery. The obstruction has been present for four days. Owing to the efforts of the gut to free itself from this entanglement, stress is put upon the band, which in turn has virtually become fused with the gut wall. Late in obstruction when this band may in effect be a part of the bowel wall, incident to the readjustment in position of the gut which attends severance of the band on one side, the gut wall may actually tear. Or if a string-like adhesion which crosses the gut is broken with the finger or cut with knife or scissors a small leak may occur at the site where the band crossed the gut. Early in obstruction, it is apparent that these bands may be safely cut. Late in obstruction this occurrence is not invariable but frequent enough to justify caution.

It is my impression that in late cases of simple obstruction, it is safer to suppress curiosity concerning the nature of the obstruction; perform the compromise measure of draining the gut by enterostomy and deal with the obstructing mechanism later if the continuity of the gut does not become automatically established.

If one looks into the abdomen of a patient with obstruction of several days standing and sees an adhesive band occluding the gut it is difficult to restrain the urge or desire to cut it. If one does, he may find that he has opened Pandora's box. On two occasions, the ease with which such bands could be divided were so enticing that I could not curb my anxiety and found, like Pandora, when I came to close up the small rent in the gut, that the Evil had escaped and that only Hope remained—which proves in such an instance usually a most unreliable refuge.

Naturally, one feels more at ease when he has been able to release the constricting band and so undo the obstructing mechanism. I would, however, urge considerable caution in dividing adhesions late in obstruction when such bands exhibit any intimate attachment to the gut. It has been a source of ever increasing wonder and gratification to me to note how temporary decompression of the gut by enterostomy will usually permit an obstructed bowel snarled in an entanglement of adhesions to establish its continuity automatically. Occasionally, a subsequent direct attack will have to be made upon the obstructing mechanism, but in my experience it has only infrequently been necessary. When the edema of the gut at the site of constriction has disappeared, manipulation of the gut need not be feared. I have been unable to comprehend the motive or the rationale that bids the surgeon to eviscerate the gut and "milk out" the distended bowel on the operating table. Patients with a distended bowel do not tolerate manipulation well; furthermore this method carries unnecessary hazard of spillage or contamina-

Suction apparatus used in certain cases of intestinal obstruction
University Hospital University of Minnesota

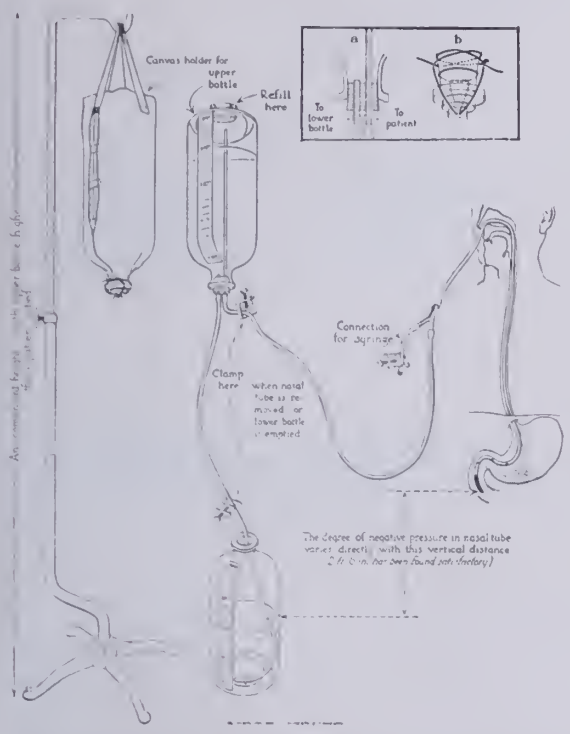

Fig. 2. Suction apparatus employed at the University Hospital for the relief of intestinal distention. The dark, distal portion of the duodenal tube is more heavily impregnated with lead to facilitate entry of the tube into the duodenum.

tion with bowel content. If an aseptic enterostomy is established, the activity of the gut, which in mechanical obstructions far exceeds the normal, will soon drain off the content of the distended segments.

In strangulation obstructions no matter how ill the patient, the vitality of the gut whose blood supply was compromised must be determined. No matter how ill the patient, if the gut is no longer viable, as determined by (1) return of color, (2) pulsation in the mesenteric vessels, and (3) contractility of the muscle of the bowel wall, it must be excised. As a general rule, it may also be said, that when the gut is not viable it is far safer usually to exteriorize the devitalized gut and establish the continuity of the intestinal canal secondarily than to do a primary resection. When the strangulated gut is unusually high, in instances necessitating sacrifice of a large portion of the small intestine and in infants who stand complete intestinal fistula poorly, it is better to simultaneously establish intestinal continuity by primary resection.

The experience of the last few years, moreover, has shown that a large number of adhesive obstructions can be satisfactorily decompressed by continuous suction applied to a duodenal tube (Fig. 2) without operation.[2,3] Instances of neurogenic obstruction also, whether spastic or inhibitive (paralytic) in nature respond better to non-operative decompression than to operative modes of relief.

The rationale of the method in the relief of mechanical obstructions is adequately established in the success of the "blind enterostomy" when dealing with adhesive obstructions. In the presence of late simple obstruction with enormous distention, the safest operation is decompression of a distended loop of intestine near the obstruction by *aseptic* enterostomy. Direct attacks upon the obstructive mechanism are usually fraught with danger and a forbidding mortality. The establishment of an external drainage vent without the minutest soiling of the peritoneal cavity practically insures the patient's recovery. The only advantage that operative decompression presents over that obtained by suction applied to an inlying duodenal tube is that following enterostomy the intestinal tube proximal to the site of drainage may be employed for nutritive purposes. Obviously, non-operative decompression is slower. In complete obstructions of the small intestine and especially where the obstructive mechanism is slow in relenting, as found by a trial with nasal catheter suction siphonage, recourse should be had to enterostomy. The limitations of the method have been elsewhere related. Briefly it may be said that apart from the persistence of the obstructing mechanism the matter that stands in the way of effecting immediate decompression of the distended gut is the interspersion of gaseous and fluid segments. If the distention were either entirely fluid or gaseous the exertion of a certain negative pressure in the upper reaches of the distended small intestine would be appreciated in the same degree at the most inferior position of the obstructed gut, even if it were as far distant as the caecum. The lapse of time, furthering absorption of fluid, the change of the patient's posture and the turbulent propulsive and retro-

grade motions of the intestinal content tend to bring gaseous segments into confluence facilitating reduction of the distention. A significant item also is that the exertion of continuous suction obviates any accretion of distention, inasmuch as swallowed air and fluids dumped in at the gateway of the intestinal canal from stomach, liver and pancreas are being continuously removed. One danger also lies in this: there being no augmentation of the distention and the patient having accommodated himself to a certain grade of intestinal distention, the crampy pain frequently stops. Roentgen films taken at the bedside every twelve hours serve to indicate how successful the decompression is. Relief of pain alone when suction is employed may prove deceiving.

Attempts at reduction of the distention by suction applied to a duodenal tube without operation is contraindicated in essentially two types of lesions, (1) strangulation obstructions, (2) obstructions of the left colon with enormous distention limited to the large bowel. In the first instance operative release of the strangulating mechanism must be done; in the latter, immediate operative decompression of the colon is indicated, for this is the one variety of simple obstruction which may eventuate without any alteration of the nature of the obstruction, in compromise of the blood supply of the gut. The ileo-caecal sphincter constitutes a check-valve; gas and fluid go in, but cannot ordinarily be regurgitated into the small intestine. As the intraluminary pressure rises, the venous and finally the capillary blood pressure is exceeded and necrosis of the gut with gangrene and perforation may occur.

In simple obstructions of the small intestine, even though the gut be dilated to a large calibre, the intraluminary tension rarely becomes great, because the proximal reaches of the small bowel and stomach participate in the distention. Together with my associate, Dr. Sperling, I have measured at operation the tension in a number of cases of obstruction of the small intestine and have never found it to be great. Whereas pressures of twenty to forty millimeters of mercury are not uncommon in obstructions of the left colon, in small bowel obstructions even when the gut is greatly distended because of the regurgitation into more proximal segments of the gut and stomach, which participate in the distention, tensions exceeding ten to twelve millimeters of mercury are unusual. True enough, these pressures if sustained, are in excess of the venous pressure and would, if long continued, prove serious, but fortunately the sustained intraluminary tension in small bowel obstruction does not exceed even the low venous pressure in the portal circulation.

In inhibitive (paralytic) ileus where the colon is also distended, it is well to employ a rectal catheter as well as an inlying nasal tube led into the stomach and upper reaches of the small intestine. Because of the usual presence of feces in the large bowel, it is best to employ irrigation alternating with suction, using a small inflow and a large outflow tube. We have employed a special duodenal tube[1] at the University Hospital for the past two years, which appears to enter the duodenum more readily than the ordinary Levine tube. The distal five inches is more heavily impregnated with lead than the rest of the catheter (Fig. 2), and in consequence it follows the gastric pathway along the lesser curvature of the stomach and is less inclined to curl up in the stomach. After the tube is passed into the stomach, suction is applied and the stomach is evacuated. When emptied, suction is temporarily discontinued, the patient is turned on his right side, given sips of water to drink over an interval of about twenty minutes, the catheter being meanwhile gradually advanced. In the majority of instances even in the presence of considerable distention the catheter then finds its way into the duodenum. Suction is now again resumed. Occasionally the tube fails to enter the duodenum, but failures with this tube have been less frequent than with the ordinary duodenal tube. The tube has perforations extending proximally for about ten inches, such that simultaneous suction may be expressed upon both the stomach and the upper reaches of the small intestine.

The technique of nasal catheter suction siphonage has been described in detail else-

[1] Made by the Davol Rubber Company, Providence, Rhode Island.

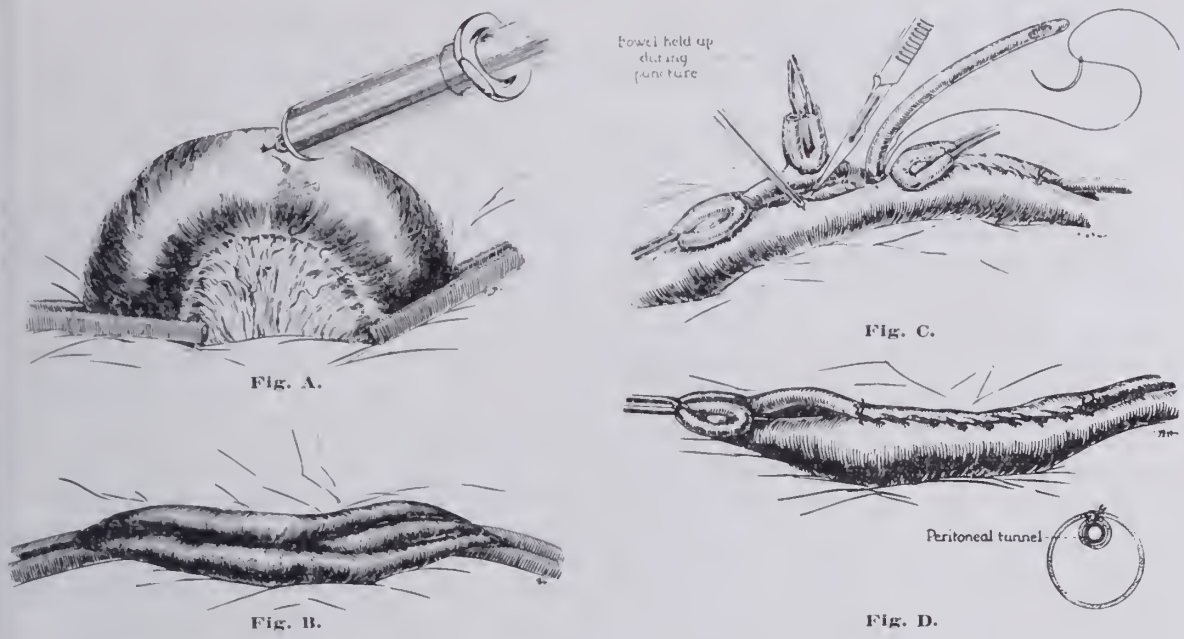

Fig. 3. An aseptic manner of performing enterostomy. A loop of distended intestine is first isolated. Its content is milked out between the fingers or aspirated with a large syringe. The entire content of the loop should be evacuated. An enormously distended gut usually contracts immediately to a small calibre. The gut wall which was thin appears thick, contradicting the impression so often expressed that the gut was so distended that it had lost its contractile activity. Sutures may now be placed without danger. If a peritoneal tunnel is established as shown in C and D, and a No. 4 French urethral catheter is employed, no fistula will persist when the catheter comes away if the continuity of the intestinal canal has become automatically established.

where[5] and will not be related at length here. An obvious essential is the liberal administration of paraoral fluids. Enough fluid should be given to insure a liberal urine output. The excretion of 800 to 1000 cc. of urine every twenty-four hours affords as reliable an indication of a positive tissue fluid balance as do more elaborate chemical tests. Five per cent glucose in saline solution given slowly intravenously (3000 to 5000 cc. daily, the amount being contingent on the urine output) or subcutaneously serves to combat the dehydration incident to accumulation of fluid in the intestine and its removal by suction.

Apart from the therapeutic agents directed at the relief of the obstruction, there are two adjuvant measures which serve to improve the patient's general condition in acute intestinal obstruction, viz., saline solution and blood transfusion. In experimental obstructions of the upper intestine of the dog, saline solution exhibits the virtues of a specific not as an antidote for a poison absorbed, but rather because it effectually serves as a substitute for the gastric, biliary, and pancreatic juices so essential to the body economy. In low obstructions, on the contrary—and the majority of obstructions observed clinically concern the lower reaches of the intestinal tube—saline solution fails to prolong materially the life of experimentally obstructed dogs. The chief value of saline solution in obstructions is as a satisfactory replacement fluid for the dehydrated patient.

In strangulation obstructions and particularly when the strangulated segment is long, the blood loss factor may be great. The mechanism which compromises the viability of the gut prevents the egress of blood through the veins; blood continues to be pumped into the gut under the motive force of systolic blood pressure; rupture of the small vessels with ensuant hemorrhagic infarction of the gut occurs, accompanied by bleeding into the lumen of the bowel and sanguineous exudation into the peritoneal cavity. Whenever the presence of a hurried pulse with a low blood pressure obtains in strangulation obstruction, its operative release may be accomplished with far less risk to the patient by preliminary transfusion of

blood. The efficacy of blood replacement in strangulation obstructions has been related elsewhere.[1,4]

SUMMARY

A careful appraisal of the functional complaint in an acute abdominal lesion, followed by a determination of the anatomical features usually serves to indicate the probable pathological nature of the lesion present. The diagnosis of bowel obstruction is usually readily made. The concomitant occurrence of intestinal noises at the acme of intermittent crampy pain establishes the presence of *intestinal colic.* No other colic of the abdomen is disclosed by so simple or reliable a finding. The presence or absence of rebound tenderness serves to determine usually whether the obstruction is simple or strangulating in character. The location of the obstruction and its degree, whether complete or incomplete, is usually readily determined by a correlation of the clinical and Roentgen observations.

The therapeutic agents available in the treatment of bowel obstruction are: the administration of saline solution; the transfusion of blood; decompression of the distended gut by suction applied to an inlying duodenal tube or by operation (enterostomy or colostomy) and a direct attack upon the obstructive mechanism. The indications, rationale and values of these respective agents are briefly discussed.

Early diagnosis and timely execution of well chosen therapeutic measures have already brought about considerable improvement in the mortality of acute intestinal distention.

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DISCUSSION

Dr. James Dean, Madison: Dr. Wangensteen has covered the subject in such a delightful manner he has left little to be said. In the discussion, I would only mention two points, both of which Dr. Wangensteen has covered quite thoroughly.

Early diagnosis, of course, is the most important factor in the reduction of mortality of intestinal obstruction. The first twenty-four hours, we realize, is the critical period in any obstruction. In simple obstruction, of course, we have a patient in condition, blood respiration and blood pressure little affected; after twenty-four hours, and in almost any type of obstruction there is beginning of some circulatory injury. Persistence in some type of therapeusis that does not relieve the obstruction in mechanical condition in a short period is only to be condemned.

Suction siphonage, we admit, has distinct advantages, especially in the cases cited by Dr. Wangensteen,—simple adhesive obstruction.

It has been the experience of all in the past that in those cases we often did an enterostomy, and in several days the enterostomy tube dropped out and the fistula healed and nothing had to be done. With this particular type of obstruction, it seems to me there is the greatest value of suction siphonage.

In strangulation obstruction, as the Doctor so well pointed out, suction siphonage may be used as a temporary measure. We can undo the haste with which we formerly rushed the patient to the operating room when we had an obstruction, give a little time to replace fluid establishing normal blood colloid or transfusion, so the patient is in general condition.

Locally the condition of the abdomen is improved to a certain extent so it facilitates any operative procedure that may be complicated.

REGIONAL (TERMINAL) ILEITIS: ITS ROENTGEN DIAGNOSIS

John L. Kantor, New York (Journal A. M. A., Dec. 29, 1934), points out that in obscure cases of apparent colitis a roentgen study of the small intestine may reveal the presence of a terminal (regional) ileitis. The roentgen study of the small intestine is based on the careful observation of a progress meal from the time the cecum begins to fill to the time the ileum should normally be empty. The chief roentgen signs in regional ileitis affect the colon and the terminal ileum. The changes in the colon, however, are likely to be reflex in nature. The chief changes in the ileum are: Filling defect just proximal to the cecum, abnormality in contour of the last filled loop of ileum, dilatation of ileac loops just proximal to the lesion and a "string sign" representing the actual lesion. The "string sign," though characteristic, is not pathognomonic of ileitis. It may be present in other stenosing processes in this region. When present, however, the diagnosis of terminal ileitis must be given consideration.

Torsion of the Spermatic Cord

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TORSION of the spermatic cord or testicle, though a comparatively rare or unusual condition, is seen frequently enough to warrant our attention. Ten years ago the recorded literature cited but one hundred and twenty-four cases, which today has more than doubled.

Trauma is a cause in a great number of cases. In others, no exciting agent can be elicited. Birdsall[1] lists such causative factors as violent muscular excitement, sudden strain, crossing of the legs and rapid walking. It may occur during sleep. Sudden contraction of the cremasteric muscle has also been cited. However, the etiological factors in the causation of torsion have not been definitely proven.

The condition may occur at any age and is usually associated with some type of congenital malformation. Owen has proved that a testicle in normal position in the scrotum with a normal mesorchium and gubernaculum cannot undergo torsion.

According to Young[2] there are two distinct types of torsion. In the first, or extravaginal type, the entire testicular mass including the tunics rotates on its vertical axis. This type is always associated with injury and results in a separation of the tunical vaginalis from the internal spermatic fascia. The spermatic cord rotates in its extravaginal position. This mechanism is especially apt to occur in undescended testes which are suddenly forced down out of their former positions by a blow or violent muscular contraction. This may also follow too forceful contraction of the cremaster muscle.

In the second, or intravaginal type, which is also the most frequent, the mesorchium is usually very long and mobile, or very narrow in its attachment from the tunica vaginalis to the testicle and epididymis. In a normal scrotum the epididymis and testicle are closely attached, and the mesorchium forms a short attachment from almost the entire convexity of the epididymis to the tunica vaginalis. A short gubernaculum is present.

Any factor that will allow for loose attachment of the testicular contents or free rotation such as hydrocele or redundant scrotum are apt to predispose.

Campbell[3] and Colby[4] claim that there are two fundamental conditions necessary for the occurrence of torsion, namely, (1) redundant scrotum, (2) mobile testicle. Ottenheimer and Bigwood[5] are of the same opinion and have devised a plastic operation for its correction.

Roche[6] claims that fifty percent of instances of torsion occur in incompletely descended testicles, and that a great many such testicles show inversion. By this mechanism inversion represents a forceful attempt to pull the testicle into the scrotum in spite of an abnormally short cord. The result is a suspended testicle in the cavity of the tunica vaginalis attached only at its superior pole and unbound at its posterior aspect by the mesorchium, and inferiorly by the gubernaculum.

The condition is usually bilaterial and may be associated with other congenital malformations. This has particular significance in the treatment. Unless corrective measures are applied to the testicle on the opposite side it may at a future time be the seat of torsion with a resulting eunuch.

Surgical Pathology. This has been excellently described by Young[7] and O'Connor[8].

At operation, the pathological findings are characteristic. The cord above the torsion contains either dilated or flattened veins, depending upon the degree of occlusion of the spermatic artery. The spermatic artery is usually partially potent, but not invariably so. The number of twists is a variable factor depending upon the mobility of the scrotal contents.

The scrotum itself is usually edematous and reddened. The testicle and epididymis may be enlarged but distinct. In other cases the scrotum is filled with a hemorrhagic mass. The appearance of the testicle is variable, depending upon the degree of circula-

tion still maintained, and the duration of the disease. It may appear blue and gangrenous, or, in chronic cases, be replaced with a fibrotic mass. In early cases the tunica vaginalis contains blood clots and in late cases the cavity is filled with adhesions, usually associated with a thickened tunica vaginalis. If infection supervenes an abscess may form. The rotation of the cord is usually from without in. This has significance if the case is seen early.

SYMPTOMS

The onset is usually sudden and may follow an injury. The patient is seized with severe sickening pain in the affected scrotum. There may be pain in the lower abdomen, nausea, vomiting, fever, chills, abdominal distention and occasionally shock. The pulse is usually rapid. The scrotum swells rapidly and may be red and edematous. The testicle and epididymis may occasionally be distinguished. In other cases only a scrotal mass may be felt.

Diagnosis. The disease is readily confused with the common inflammatory diseases of the epididymis and testicle. There may also be confusion with gumma, tumor, and metastatic abscess. Particularly in undescended testes may the condition be confused with strangulated hernia. The diagnosis of epididymitis or architis is all too frequent in this condition and if palliative treatment is instituted, the loss of the testicle is inevitable.

However, a well taken history, the lack of urinary symptoms, the mode of onset, and the usual occurrence in youth should focus our attention on the possibility of torsion.

Prognosis. The condition, though not fatal, is one of grave importance, for unless recognized early, the result is castration of the affected organ. Particularly in bilateral cases does the seriousness become evident.

Treatment. If seen early, detorsion may at times be possible. This is done by slowly rotating the testicle between the thumb and index or middle finger. The testicle is rotated on its vertical axis, first from within outward, as torsion is most apt to occur in the opposite direction. If this causes greater pain, rotation may be tried in the opposite direction. The manipulation should be gentle and continued until there is relief of pain or until it is evident that rotation is ineffectual. Failing this, operation is immediately indicated as gangrene will develop in a short time.

In late cases, where gangrene has already been established or where the application of heat does not restore color to the testis, castration should be done. If seen early, one of the many types of archidopexy can be done. All of the operations for archidopexy have for their purpose the anchoring of the testicle into the scrotum. At times this may be difficult or impossible depending upon the degree of circulation that can be maintained.

In the event the opposite scrotum is the site of a congenital abnormality or defect, an attempt at its correction should be made. This will prevent the occurrence of torsion at some subsequent time.

CASE REPORT

The patient is a married male 32 years of age; entered the hospital April 23, 1933, at 2:34 A. M.

Entrance complaint: The patient fell about four hours prior to admission, striking his scrotum. About two hours later he developed severe sickening pain in his left scrotum radiating to the lower abdomen. There were no other symptoms.

Family History: Essentially negative.

Past History: Essentially negative except for an uncomplicated gonorrhea in 1926. An inventory of the gastro-intestinal, cardio-respiratory, and central nervous system was negative. The genito-urinary history was negative except as noted.

Physical Examination: This revealed a well developed, well nourished male, in excruciating pain.

The physical examination was essentially negative except for swelling of the left scrotum. The left testicle and epididymis were slightly enlarged and very painful. The testicle and epididymis were rotated from within outward and immediate relief of pain was felt. A small hydrocele was present. The right scrotum appeared normal. The pulse was 80, temperature 98.6, blood pressure 118/68, and urine negative.

Tentative Diagnosis: 1. Hydrocele. 2. Torsion of the testicle.

Immediate operation was advised and accepted.

Under ether anesthesia, the left scrotum was cut down upon. The cavity of the tunica vaginalis was filled with a serous bloody fluid and extended well up on the spermatic cord. The gubernaculum and mesorchium were absent. Due to the lack of attachment and the long spermatic cord, the testicle could be

rotated at will. The testicle appeared slightly cyanosed, but with the application of heat the normal color returned. It was literally suspended in the scrotum at its upper pole.

The tunica vaginalis was partially resected and the testicle anchored laterally and inferiorly by No. 2 chromic catgut. A small rubber drain was left in the scrotum.

The patient had an uneventful convalescence and was discharged April 31, 1933, the wound entirely healed and the testicle apparently normal.

RESUME

1. A case of torsion of the spermatic cord with successful detorsion is presented.
2. Though comparatively rare, the condition is seen frequently enough to warrant our attention.
3. An abnormally long spermatic cord, hydrocele, undescended testes, and above all, congenital defects in the gubernaculum and mesorchium predispose. Injury and forceful contraction of the cremaster muscle are exciting factors.
4. The differential diagnosis, though not difficult, may be easily confused with strangulated hernia, acute inflammatory diseases of the scrotum, tumor, or gumma.
5. A careful history, lack of urinary findings, and physical examination are essential to diagnosis.
6. Detorsion is possible in early cases and early diagnosis is necessary if the affected testicle is to be saved.
7. Prophylaxis to the opposite testicle is advisable in bilateral involvement.

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Safety Spectacles for the Color-Blind*

By VERNON A. CHAPMAN, M. D.
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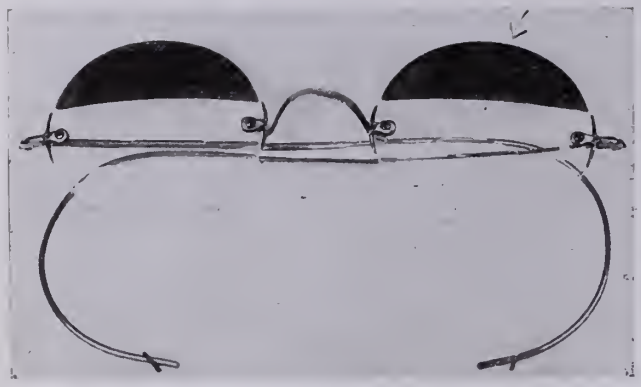
THE one great problem of the color-blind just now and one which is becoming more and more pressing and acute is that of red and green, danger and safety, stop and go, signals.

The medical profession has wholly failed to offer any relief to the color-blind. We have just said "You are color-blind" and let it go at that. Indeed, some of us have done worse and laughed after we said it. For some reason or other there is supposed to be a joke in the color-blind matter. I myself never could see the reason for the joke, if joke there be. Perhaps there is no joke; and it is that science and medicine laugh in order to camouflage self-recognized failure to furnish any relief to the color-blind.

The primary step in the settlement of any argument is to find some basic point that is always constant in common and is acknowledged and accepted as such by all concerned. So in the color-blind driver traffic signal problem it is necessary to find some one "color" which is always perceived, recognized and designated the same and identically by individuals with any type of color-blindness and by those not at all color-blind. Such a color (so called) is black.

Black is one color (so called only, because it is really an absence of color) which all individuals perceive alike and on which all do agree and meet on a common ground. Black is black and there is no getting around it. The reason it is black is that every part of all of the colors of the spectrum which compose the ordinary ray of white light is absorbed. Where there are no colors involved, there can be no argument, dispute or variance between the color-blind and the non-color-blind. And therein lies the solution to the traffic lights problem of the color-blind. It reminds me of the old story of the doctor who was possessed of limited but intense

* Reprinted by permission from Transactions of the Section of Ophthalmology of the American Medical Association, 1933.



Spectacles for red-green color-blind automobile drivers. Red-free glass or other red filter at top of lenses.

ability. The one and only one affliction that he could cure was fits. There was never a case of "fits" that he could not cure. Therefore whenever he was called to attend cases that were obscure to him, he promptly threw them into fits; and then he was "hell on fits."

All the color-blind driver has to do is to throw the red signal into black and then he is "hell" on black. He knows black every time and you cannot fool him on that. Try it some time. And the beauty of it all is that the black which he perceives and calls "black" is exactly the same as the black which the non-color-blind sees and names "black." If the color-blind individual can quickly and positively determine the presence or absence of red, his traffic light troubles are ended.

Therefore the color-blind should take a tip from the old doctor's solution of his problem of limitation. He should throw all of the red into black and then he is "hell" on black.

All that the color-blind individual has to do to accomplish that is to interpose between his eyes and the puzzling traffic signal a piece of "red-free" filter of glass or celluloid transparency. If the color which he cannot determine stays the same as he first perceived it before interposing the red-free filter, it is not red. If it changes to black when so viewed, it is a red signal. And there you are. He is not guessing at it. He knows!

A short time ago a color-blind patient of mine (who is not ashamed to "confess" to the "crime" of being color-blind) told me that he wished to drive his automobile from Wisconsin to Washington, D. C., and back again. I asked him how he managed the traffic color signals problem. He answered that he had to sort of guess at, or estimate by shades, the color of signals, do what the other fellow did, or, in case of extreme doubt, just "sit tight" and play safe until he could some way or other eliminate the quandry.

Being a man of composure and of highest intelligence (a teacher of science), he had kept out of serious traffic difficulties. There was, however, always that element of doubt and indecision, which annoyed him.

He has spectacles which he wears for correction of refractive errors. Against the upper part of each of his spectacle lenses I caused to be fitted a section of "red-free" filter glass. I instructed him to wear these spectacles when on his drive to and from Washington.

When he approached a traffic color signal he ordinarily perceived it as gray. He did not know whether it was red or green. All he had to do when wearing the new glasses was to tilt his head down forward a little and view the signal through the red-free filter at the upper part of his lenses. If the signal remained the same as he previously perceived it, it was green and he could proceed. If it changed to black (the death color, if you like) he knew that it was really red, a danger or "stop" signal, and he governed himself accordingly. He wore these spectacles in his drive to Washington, while in traffic there, and all the way back to Wisconsin. He was in doubt about signals only twice in all that time, once on account of an impure red signal glass which transmitted a great amount of yellow rays; the other time because of a signal which was out of order and not in operation. Not only did he drive with perfect confidence, but he was the most free from eye discomfort he had ever been on any of his travels. The red-free filter at the top of his spectacles reduced the direct glare from the sun.

With such a pair of spectacles the color-blind driver is as safe for himself and to others as any one who wears spectacles for correction of high degree errors of refraction.

There is no need to deprive the color-blind of the driver's or pilot's license. All such an

individual needs to do is "confess" the "crime" before men and wear his special type of spectacles.

Before long, four in every hundred men, and two in every hundred women driving automobiles on streets and highways, will be wearing such spectacles. It will require some courage for the pioneers to wear them, but soon it will become accepted as commonplace.

Cataract Extractions: Report of 108 Intracapsular and 47 Extracapsular

By E. E. CARL, M. D.
Milwaukee

THIS is a report of 155 consecutive extractions of cataract on patients over thirty-five years old in Shikapur, Sindh, India, performed under adverse conditions. If the reader is unfamiliar with conditions there, he may find elaborate details in many of the papers written by students returning from India.[1, 2]

The patients are a dirty crowd assembled about the examiner who usually makes the examination and diagnosis of each case in less than a minute. If cataract is present, the patient is herded toward the operating room where he squats, and patiently waits his turn. The operating physician makes no selection of cases. A native assistant drops 4% cocaine in the eye at intervals, for three or four doses. The patient may have arrived a half hour or less before from a journey of many miles, but he receives no other preparation for the operation. He is often tired, dirty and nervous, and may be in very poor general physical condition.

OPERATION

The outer cilia are clipped,[3] and the eyes irrigated with a 1:3000 bichloride solution from a suspended irrigator. The lids are everted and rubbed between the fingers while the solution runs over them. This completes the preoperative preparation. The incision is made at the sclero-corneal juncture just above the 180th meridian, and continued upward at the margin of the cornea until completed. No flap or sutures are used. No akinesis, no retrobulbar anaesthesia, no canthotomy, no bridle sutures under superior rectus muscles are used in any of the cases. The speculum used was the spring speculum of Smith,[4] which was removed in all intracapsular cases as soon as the incision in the cornea was completed, and the lids were then controlled by an assistant with the Fisher lid hooks.[5] In the extracapsular cases, the spring speculum was used until operation was completed. The technic of the intracapsular removal of the lens was that of Colonel Smith[6]. The capsulotomy was made in all of the extracapsular extractions with the point of a cataract knife making a cut in the capsule from side to side just above the equator of the lens.

As soon as the operation is completed, and the toilet finished, the speculum is removed from the eye, and a thin piece of cotton soaked in bichloride placed over the closed lids, and the bandage applied by the native assistant. Often the bandage is being applied while the patient is being carried from the operating room in the arms of a native three or four blocks to the rudely constructed shelters. These shelters are low, dark, poorly ventilated, overcrowded, and often smoke-filled. Here the patient lies on his native bed and often is found sitting up or walking around when the doctor makes his call the following day. What little care the patient receives following the operation is given by the family, and naturally is of little value.

In the burst capsule cases, an attempt was made to do an intracapsular operation, but after the capsule burst, the eye was treated as a capsulotomy, except that the incision in the capsule was unnecessary. There were no serious complications in any of these burst

SUMMARY

Intracapsular		108
Extracapsular		47
		155
Burst capsule—capsulotomy		14
Iris prolapse—intracapsular		3
" " —extracapsular		1
Capsule in pupil		14
Cleared on 10th day	5	
Not cleared	9	
Vitreous loss		10
Choroidal hemorrhage		2
Cortex in pupil—cleared on discharge		1
Cortex in pupil—not cleared		3
Striped keratitis		6
Infection		1
Spoon delivery		3
Leukoma		1
Vectus delivery of lens		3
Extruded lens		2
Everted flap		2
Lens lost		1
Blood in anterior chamber—cleared		3
Glaucomatous cataract		1
Vision		
Poor—cortex, capsule, etc.		14
Good		138
Loss		3

capsule cases. Two had choroidal hemorrhages with evisceration of the eye. One of these followed an intracapsular extraction, while the other followed a capsulotomy. One case was an attempted intracapsular with burst capsule and vectus delivery, but results were good on the 7th day. Another was an attempted intracapsular with burst capsule and cortex in the pupil. Vision probably improved later than the 10th day, and a further improvement would follow needling.

CONCLUSION

Iris prolapses run about the same percentage in both types of operation, while the vitreous loss is slightly less in the intracapsular method. The two everted flaps were caused in each case by the patient opening the dressing soon after the operation to test results. The operation of choice for removal of cataract is some form of intracapsular extraction, but if this method is not satisfactory, it can be finished by extracapsular without added risk. With akinesis and retrobulbar anaesthesia the danger would be lessened.

This paper was written to advocate some form of intracapsular operation of cataract, not necessarily the Smith intracapsular, although all of the cases recorded have been performed by that method.

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Toxic Pruritus Secondary to Chronic Nephritis

By MAURICE J. REUTER, M. D.
Milwaukee

MANY varied lesions of the skin have been described in association with nephritis. It is quite generally accepted, however, that none of these manifestations of the skin are specific.

The following case of extreme renal failure was of unusual interest because the only subjective symptom present for which the patient sought relief was that of severe, generalized pruritus. The case also serves to illustrate admirably that in dealing with diseases of the skin, the point of view and the method of approach are similar to those of the internist.

REPORT OF CASE

A man, aged 39 years, was first seen on February 3, 1933, complaining of severe, intractable, generalized itching. In December, 1932, six weeks before, the patient developed itching over the shoulder blades. Some days following this, red itching spots appeared elsewhere on the trunk and extremities. A physician was then consulted and a diagnosis of scabies was made for which a sulphur ointment was prescribed. Immediately following the application of the sulphur ointment, the

itching increased in severity and many new red spots appeared. Several other physicians were then consulted and various lotions and ointments were prescribed with no relief. For ten days before consulting me, the patient had experienced intolerable itching which had interfered with his rest to such an extent that his sleep was limited to one to two hour intervals.

The past history revealed nothing of importance except that about eight months before a trace of albumen was discovered in his urine on several occasions. His blood pressure at that time, he stated, was 120 systolic. The patient had been a rather heavy drinker for years.

Examination revealed a tall, rather poorly nourished, and emaciated male who appeared quite ill and exhausted from lack of sleep.

Scattered over the entire body from the scalp, which was partially bald, to the dorsum of the feet, were numerous, discrete, dug-out and linear excoriations. Most of the lesions were covered with a brownish, bloody crust and varied in size from the size of a split pea to that of a dime and larger. There were no other elementary lesions of the skin present, such as papules, vesicles, bullae, or wheals. About the shoulders and upper arms were several small patches of dermatitis manifested by redness and scaling, apparently from the use of sulphur ointment.

Aside from the skin, the general physical examination, including ophthalmoscopic examination, revealed no abnormalities except for a blood pressure of 170 systolic and 110 diastolic.

In view of the skin findings, together with the history of albuminuria and the rather sudden rise in blood pressure, a tentative diagnosis of toxic pruritus, secondary to chronic nephritis was made and the patient admitted to the Columbia Hospital for laboratory study.

Laboratory Data

Urine: specific gravity, 1010; color, yellow; sediment, clear; reaction (litmus), neutral; sugar (Fehling), negative; albumin, trace.

Microscopic examination: Occasional W.B.C. and epithelial cells.

Total Amount of Urine in 3 Hour Specimens

1 P. M. to 4 P. M.: sp. gr. 1007, albumin trace;
4 P. M. to 7 P. M.. sp. gr. 1005, albumin trace;
7 P. M. to 10 P. M.: sp. gr. 1010, albumin trace;
10 P. M. to 1 A. M.: sp. gr. 1010, albumin neg.

Urine Phenolsulphonphthalein tests

1. specific gr. 1007, volume 90 c. c., no elimination of dye.

2. specific gr. 1005, volume 130 c. c., no elimination of dye.

Blood: hemoglobin, Dare 50% erythrocytes, 2,610,000 per cu. cm., leucocytes, 10,350 per cu. cm. Differential Count—polymorphonuclears, 62. per cu. cm.; small lymphs, 5.5 per cu. cm.; monocytes, 8. per cu. cm.; eosinophiles, 24.5 per cu. cm.; platelets, normal.

Wassermann—negative.

Kline slide precipitation test—plus one.

Blood Chemistry: N. P. N., 202. mgs. per 100 c. c.; urea, 315.4 mgs. per 100 c. c.; urea N., 147.4 mgs. per 100 c. c.; creatinine, 13.2 mgs. per 100 c. c.; creatinine N., 4.9 mgs. per 100 c. c.; icterus index, 5.7 mgs. per 100 c. c.; alkali reserve, 57.5 cc. of CO_2; sugar, .123%.

An internist, who was called in consultation, concurred in the diagnosis of chronic nephritis. At no time while the patient was under observation was there edema. The only suggestive manifestations of uremia were lethargy, transitory muscular twitchings, and insomnia, in spite of the extreme degree of nitrogen retention due to renal failure.

Using soothing lotions to the skin, colloid baths, and luminal, the patient was made fairly comfortable. Diet was restricted to 50 grams of protein per day. Fluids were forced moderately. Ten grams of sodium bicarbonate daily were given to combat a mild acidosis indicated by a blood CO_2 of 57.5% by volume. Five grams of sodium chloride were given to replace the loss of base and chloride. These measures were continued during his five days in the hospital.

A very unfavorable prognosis was given. The patient returned to his home in another city and expired on February 27, 1933, some two and a half weeks after his dismissal from the hospital.

HIP JOINT TUBERCULOSIS TREATED BY FUSION OPERATION: END RESULT STUDY OF ONE HUNDRED AND SEVENTY UNSELECTED CASES

Halford Hallock and James W. Toumey Jr., New York (Journal A. M. A., Dec. 15, 1934) observed 170 unselected cases of hip joint tuberculosis that underwent operation by the hip fusion method of Dr. Russell A. Hibbs. In this operation the anterior three-fourths of the greater trochanter, with its muscle and periosteal attachments intact, is transposed so as to make contact with the ilium above and the femur below and to secure at the same time periosteal continuity. Of the 170 patients, seven died within one year after operation. Of the 163 remaining patients who were available for examination one year or more after operation, all except one were roentgenographed at the hospital and examined. The time of follow-up examination varied from one to eleven years inclusive and comprised a total of 888 and an average of 5.4 case years. Of the 163 patients, 112, or 68.7 per cent, obtained a fusion by the first or primary operation. In fifty-one cases, or 31.3 per cent, the operation failed. A second operation was performed in forty-one of the failures. Twenty-six of these (66⅔ per cent) were successful, thirteen were failures, one terminated fatally two days after operation, and in one the operation has been done too recently to show the result. Six cases required a third operation. Of these, four succeeded and two failed. If the successes of the reoperative cases are added to the 112 in which a fusion was obtained by primary operation, there are 142 hips, or 87.2 per cent, that are fused, and twenty-one, or 12.8 per cent, that are not. Fusion through the transposed trochanter was followed by fusion through the diseased area and gave an extremity that was stable and free from pain, and one that could be relied on for unrestricted weight bearing. Twenty-six (16.7 per cent) of 155 cases in which a note was made showed sinuses when last examined. In twenty-two of these fusion was present. Fourteen belonged to the group seen five years or more after operation. Thirteen patients have died. Seven of the deaths occurred within one year after operation and six afterward. Two were operative deaths.

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« « « EDITORIALS » » »

Use and Abuse of Iodine in Treatment of Goiter

IN 1850 Chatin presented evidence that iodine would prevent the development of endemic goiter and cretinism.

Since then the proper use of iodine in the treatment of goiter has caused considerable discussion and disagreement. While the last word remains to be said certain principles proven by clinical experience are now accepted.

In pregnancy, in the absence of an adenomatous goiter, iodine should be administered in weekly doses of ten milligrams as a protection to the mother and child. The overtaxed thyroid of the mother is relieved and the tendency to hypothyroidism and goiter in the child is lessened.

Colloid goiter may be prevented in children by the weekly administration of small doses of iodine. Under ten years of age ten milligrams is given. This dosage is doubled between the ages of ten and fifteen, and tripled between the ages of fifteen and twenty-one. Thereafter, except during pregnancy, iodine is of transitory benefit.

Iodine seldom has any appreciable effect in the treatment of colloid goiter of youth. Occasionally a marked reduction in size is noted especially if thyroid gland therapy is also used. Since adenomatous goiters undoubtedly develop in neglected colloid goiters as a compensatory hypertrophy, iodine should be given to all children living in the goiter area.

Most females living in the goiter regions tend to develop goiter (in some areas 80 per cent have colloid enlargements) consequently all should receive iodine between the ages of three and twenty-one. Iodine may be omitted during the summer months as analysis of the iodine content of the blood shows the highest concentration at this season.

While proof has not been established that iodine deficiency is the cause of goiter, careful observation of many thousand children has shown that goiter may be prevented by the use of iodine. If bacteria are a factor, iodine must render innoxious.

Adenomatous goiter cannot be eradicated by iodine, but associated colloid may decrease causing the goiter to appear smaller, although the adenomatous portion persists.

Since adenomatous goiters rarely if ever become toxic in youth, iodine in small amounts may check their growth until a suitable age for operation is reached. The parents should understand that iodine will not eliminate the goiter.

There is no successful medical treatment of goiter after maturity except in pregnancy and as a preoperative measure.

Iodine hyperthyroidism is a condition that develops in a previously non-toxic adenomatous goiter as a result of the injudicious use of iodine. This syndrome was recognized by Kocher and termed Jodbasedow. This confuses the syndrome with Basedow's disease or exophthalmic goiter so the name iodine hyperthyroidism in an adenomatous goiter is suggested to clarify the distinction.

Approximately forty per cent of cases of toxic adenomata are benefited by preoperative preparation with iodine. In a small number iodine raises the metabolic rate but since medication is seldom given longer than ten days little harm is done. Consequently it is safe and advisable to give iodine to all cases of toxic adenoma while preparing for operation.

Iodine in the form of Lugol's solution should be given all cases of exophthalmic goiter during the period of preoperative preparation of one to two weeks.

Iodine fast exophthalmic goiter is a serious condition resulting from the prolonged administration of iodine. The patient becomes refractive to iodine and no longer shows favorable response to its use. If thyroidectomy is attempted in this condition fatal postoperative hyperthyroidism may result. If iodine is stopped a crisis and death may follow. If iodine is continued low grade hyperthyroidism continues resulting in chronic myocardial, vascular and visceral drainage. Any physician who knowingly keeps a patient with exophthalmic goiter on prolonged iodine therapy is responsible for the resulting condition.

Iodine may be safely given any patient for a period of ten days as a therapeutic test. Unless a decided clinical improvement occurs the case is not one of exophthalmic goiter. The iodine should be stopped unless immediate operation is contemplated for exophthalmic goiter.

While iodine may not be safely continued more than a few weeks in the preoperative preparation, it should be continued for at least three months in the postoperative care. Moreover in the case of a persistence or recurrence of symptoms it may be safely used over a period of months with the expectation that an occasional case may return to normal, but if myocardial changes appear secondary operation should no longer be delayed. A. S. J.

Edema

ONE of the most baffling symptoms in many diseases is edema. It occurs in such a variety of diseases that no single explanation satisfactorily accounts for its presence in all cases. The fluid which exudes into the tissue spaces at times contains much protein, at times very little.

The edema which occurs in patients with congestive heart failure has not been difficult to explain. In such cases the increased venous pressure in the small venules offers such an obstacle to the forward movement of blood from the capillaries that pressure causes a seeping out of fluid from the capillaries into the tissue spaces. Often venesection of a pint (500 c.c.) of blood will relieve the venous pressure and start the fluids back into the vessels.

It is the edema of nephritis, of lipoid nephrosis, of cachectic states, of anemia, etc., which have been difficult to explain. Now there seems to be some light on this most important subject as the result of Starling's theory which he advanced in 1895. The gist of this conception depends upon the essential difference in behavior of colloids (proteins) and crystalloids (sodium chloride for example) in suspension or solution upon a permeable membrane. In the body the membrane is the endothelium of the capillaries. Also conditions affecting the permeability of the capillaries enter into the picture. (I must assume that my readers know what is meant by osmotic pressure.) Starling found that the colloid osmotic pressure of the blood serum was proportional to the concentration of protein in the serum. He advanced the theory that a decrease in the colloid osmotic pressure (now known as the oncotic pressure) was responsible for the loss of fluid into the tissues and the production of edema. He contended that the crystalloids, though having a high osmotic pressure, have little influence on the exchange of water, because they pass through the walls of the capillaries with

the water, while the proteins, although having a much lower osmotic pressure, exert the principal influence because they do not pass through the walls of the vessels under normal conditions. It was on the basis of this theory that Epstein explained the edema of lipoid nephrosis.

Hand* has recently reviewed the subject in a most interesting manner. It is known that the protein of the serum is composed largely of albumin and globulin. Normally the amount of the former is about twice that of the latter. Further it is found that the amount of serum albumin is the important factor in the edema. That is to say when any disease lowers the serum albumin below a certain critical level then, however high the globulin may be, edema sets in. Normally as blood flows through the capillaries there is the hydrostatic pressure which tends to drive fluids through the capillary walls, and the oncotic pressure of the non-diffusible proteins which tends to draw water from the tissues into the blood stream. It can be readily seen that if the capillary membrane is injured by any physical or chemical agent, even though the blood proteins be normal, fluid will exude into the tissues. This phenomenon is familiar to all, for example after a bruise, or in any local inflammation.

In practically every disease accompanied by edema the serum proteins are lowered but the all-important factor in the production of the edema is the greater proportionate reduction of the albumin fraction. There are cases in which the total serum protein is within the normal values, 6.2 to 8 grams per 100 c.c. of blood, yet edema is present. In such cases it is found that the globulin makes up the greater part of the protein but the albumin is actually far below normal.

If this conception of edema be true, and there is cumulative evidence that it is true, then what are we doctors going to do about treating our patients who develop edema? We cannot have the blood plasma of our patients analyzed for albumin and globulin and total protein. This requires a trained chemist and is a tedious process. Here again we make use of the knowledge gained for us by the laborious work of investigators. We accept the fact that the serum albumin is low because it has been demonstrated that such is the case in edema. What the actual number of grams per 100 c.c. of blood is should not concern us too much. It might be interesting to know the exact figure but as we know there is low serum albumin, we can treat our patients intelligently without subjecting them to added expense of elaborate laboratory examination.

One fact in treatment stands out like a sore thumb. If the body is losing quantities of protein in the urine (and this protein is almost entirely serum albumin, not globulin), and edema is present, then the blood serum albumin is depleted and proteins *must* be fed to the patient.

In spite of the common practice of withholding meat and eggs from patients who have chronic nephritis with edema, there is no justification for the practice. There is now ample evidence that the kidneys are not harmed by protein in the diet, and when the body is losing protein the protein must be supplied in the food. We do not yet know just where the proteins are formed. At least one, fibrinogen, is made in the liver. We do know that we must give our patients protein in more than the .6 gm. per Kg. of body weight because not only is the body depleted of protein but it must have protein to replace normal waste. Carbohydrates are also of value because they act as sparers of protein and fat should be used in normal quantities. A reduction in the sodium chloride intake should be practiced as well as a reduction in the fluid given. Salt alone reduces edema. Distilled water at times reduces edema, but salt and water usually increase edema. If the kidneys are functionally normal one can use the mercury diuretic, salyrgan. Also one can use ammonium chloride, ammonium nitrate or potassium nitrate in doses of 8 to 12 grams (120 to 180 grains) daily.

If one keeps in mind the conditions present in the body when edema occurs one can do much more for this patient than he could do formerly. L. M. W.

* Concentration of Serum Protein in Different Types of Edema. Harold M. Hand, Arch. Int. Med., 54:215, 1934.

Society Proceedings

ASHLAND-BAYFIELD-IRON

The annual meeting of the Ashland-Bayfield-Iron County Medical Society was held in Ashland, the following officers being elected for the year 1935: President, Dr. M. S. Hosmer, Ashland; Vice-President, Dr. C. W. Lockhart of Mellen, and Secretary-Treasurer, Dr. R. O. Grigsby of Ashland.

CLARK

A meeting of the Clark County Medical Society was held at Hotel Robinson, Colby, on Wednesday evening, December 5th.

County Judge Schoengarth was the principal speaker of the evening. He discussed the method used in sending indigent cases to the Wisconsin General Hospital, the quota for Clark County, the average cost of the patients to the County when the quota is exceeded and pleaded for a closer cooperation of the physicians with the County Judge.

Representatives of the County Poor Relief Department were present. They pointed out the advantages of the County relief system as opposed to the township relief system. It was agreed unanimously by those present that the county system would be of greater benefit to the public, at least during the present emergency, and in order to attain this end the county physicians were instructed to contact the County Board on this matter.

A. H. K.

DANE

Dr. Ira Sisk of Madison was chosen president of the Dane County Medical Society at a meeting of the Society on December 11th. Others elected were: Dr. Karl Amundson of Cambridge, Vice President; Dr. Norman Thomas of Madison, Secretary-Treasurer.

Plans for a weekly series of broadcasts over WIBA on health subjects were discussed at this meeting and will begin in the near future.

GREEN

Dr. Harry E. Mock of Northwestern University Medical School and Dr. E. A. Edwards, also of Northwestern, were the guest speakers before the meeting of the Green County Medical Society held on December 14th at Monroe.

GREEN LAKE-WAUSHARA-ADAMS

Members of the Green Lake-Waushara-Adams County Medical Society gathered at the Chase Hotel, Wautoma, to hear Drs. W. D. Stovall and John W. Harris, both of Madison.

JEFFERSON

The Jefferson County Medical Society held its annual meeting Thursday, December 13th. The following officers were elected for the coming year: President, Dr. Otto F. Dierker of Watertown; Vice President, Dr. J. F. Dennis of Waterloo; Secretary-Treasurer, Dr. A. A. Busse of Jefferson; Censor for three years, Dr. Phillip Leicht of Lake Mills; Public Health Committee for three years, Dr. L. H. Nowack of Watertown; Delegate, Dr. H. P. Bowen of Watertown; alternate delegate, Dr. W. S. Waite of Watertown. A.A.B.

KENOSHA

At the annual meeting of the Kenosha County Medical Society held on December 12th at the Elks Club in Kenosha, Dr. W. C. Stewart of Kenosha was re-elected to serve for another term as President of the organization. Other officers elected are as follows: Vice President, Dr. Margaret V. Pirsch; Secretary-Treasurer, Dr. E. F. Andre, Kenosha, and Dr. Charles Ulrich, member of the Board of Censors. Dr. A. F. Ruffalo of Kenosha was named as delegate.

A buffet luncheon concluded the meeting.

MARATHON

Officers of the year 1935 were elected at the annual meeting of the Marathon County Medical Society on December 18th as follows:

President, Dr. R. F. Fisher, Wausau; President-Elect, Dr. W. E. Frenzel, Wausau; Recording Secretary, Dr. J. K. Trumbo, Wausau; Treasurer, Dr. G. H. Stevens, Wausau; Program Committee, Drs. J. M. Freeman, Chairman, F. C. Prehn and H. R. Fehland, all of Wausau; Legislative Committee, Drs. I. M. Addleman, Chairman, W. A. Green and F. C. Prehn, all of Wausau; Board of Censors, Dr. H. H. Christensen, Chairman, H. R. Fehland and P. Z. Reist, all of Wausau; Delegate, Dr. S. M. B. Smith, Wausau and Alternate Delegate, Dr. E. E. Flemming of Wausau. J.K.T.

MILWAUKEE

The annual meeting of the Medical Society of Milwaukee County was held on December 13th at the Milwaukee Athletic Club, beginning at six-thirty o'clock.

Following the annual report, Mr. J. G. Crownhart, Secretary, of the State Medical Society, spoke on "Medical Legislation."

Dr. A. A. Hayden, Secretary of the Board of Trustees of the American Medical Association followed with an address on "The Institution of American Medicine."

Dr. Dexter H. Witte, the new president, discussed "Health Insurance."

The Report of the Nominating Committee then took place, the following physicians being elected by the Society: Dr. Chester M. Echols President for 1936. Dr. Echols was nominated from the floor and defeated the Nominating Committee's choice by 192 to 80. Other selections made by the Nominating Committee were unanimously accepted by the Society. They include: Secretary, Dr. H. J. Olson; Treasurer, Dr. Joseph C. Griffith; Board of Directors and Censors, Dr. Charles Fidler and Dr. George W. Neilson; Delegates to the 1935–1936 meetings of the State Medical Society, Dr. Joseph Lettenberger, Dr. Francis D. Murphy, Dr. James C. Sargent, Dr. H. W. Powers, Dr. H. J. Gramling and Dr. G. W. Neilson; Alternate Delegates, Dr. F. E. Drew, Dr. W. D. Nelson, Dr. R. E. Fitzgerald, Dr. H. C. Schumm, Dr. A. R. Langjahr, and Dr. Edward Jackson.

Dr. Charles Fidler, retiring president, was presented with a silver mounted gavel. A rising ovation was given Dr. H. J. Gramling, retired as director after nine years of service.

OUTAGAMIE

The October meeting of the Outagamie County Medical Society was held Tuesday, October 30th, at the Riverview Sanatorium with Dr. C. D. Boyd of Kaukauna, Medical Director.

Dr. Forrester Raine of Milwaukee spoke on many interesting phases of tuberculosis and showed lantern slides.

The November meeting was held on the 22nd at which time Dr. Ernest E. Irons, clinical professor and chairman of the department of medicine and dean of Rush Medical College, spoke to the members on anemias and other good dyscrasias.

The December meeting of the Society was held on the 13th at which time the following officers were elected: President, Dr. W. J. Frawley, Appleton; Vice President, Dr. W. H. Towne, Hortonville; Secretary–Treasurer, Dr. G. W. Carlson, Appleton; Delegate, Dr. A. E. Rector, Appleton; Alternate, Dr. Albert Leigh, Kaukauna; Censors re-elected: Dr. J. L. Benton, one year; Dr. Albert Leigh, two years; Dr. W. E. Archer, three years.

Following the election of officers the Society entertained as its guests, their wives and friends, the dentists and lawyers and their wives and friends.

The feature of the evening was an excellently delivered address by Dr. Silas Evans of Ripon who spoke on "The Relationship of the Professional Man to Society as a Whole."

Ninety-four attended the dinner. G.W.C.

RICHLAND

At a meeting of the Richland County Medical Society held at the Richland Hospital on December 13th, the following officers were elected: President, Dr. George Parke, Viola; Vice President, Dr. L. C. Davis, Richland Center; Secretary–Treasurer, Dr. Gideon Benson, Richland Center; Delegate, Dr. B. I. Pippin, Richland Center and Alternate Delegate, Dr. George Parke.

The following members were elected as the Cancer Committee: Dr. Gideon Benson, Dr. W. C. Edwards, Dr. L. C. Davis. The Secretary of Iowa County, Dr. H. M. Walker, was appointed by the Society as a committee of one. G.B.

SHEBOYGAN

At the invitation of Rocky Knoll Sanatorium a regular meeting of the Sheboygan County Medical Society was held there on November 22nd. A large and appreciative audience from this and surrounding counties partook of a delicious six o'clock dinner and then listened to the following program on advances in the treatment of pulmonary tuberculosis:

1. "What the Sanatorium Offers" by G. L. Bellis, M.D., Milwaukee.

2. "Insulin and Nutrition in Tuberculosis" by A. L. Banyai, M.D.

3. "Mechanical Measures in the Treatment of Pulmonary Tuberculosis" by Forrester Raine, M.D., Milwaukee. A. C. R.

WAUKESHA

The annual meeting of the Waukesha County Medical Society was held at the Oconomowoc Health Resort on Wednesday, December 5th, for the purpose of electing officers for the year 1935. The following officers were elected:

President, Dr. M. J. Werra, Waukesha; Vice-President, Dr. F. L. Grover, Hartland; Secretary–Treasurer, Dr. J. F. Wilkinson, Oconomowoc; Delegate, Dr. H. A. Peters, Oconomowoc; Alternate, Dr. H. T. Barnes, Delafield; Censor for three years, Dr. J. B. Noble of Waukesha.

It was moved by Dr. A. W. Rogers, seconded by Dr. R. E. Davies that each new applicant for membership be required to present to the society a thesis on some scientific subject or in the form of a ease report to the county society either before or immediately after his election to membership. The motion was carried.

Considerable discussion arose concerning the need for the presentation of more scientific papers for our regular monthly meetings by the members of the society themselves and resulted in a motion by Dr. R. D. Thompson, seconded by Dr. A. W. Rogers that the program committee arrange for one scientific paper at each monthly meeting to be delivered by one of our members. This motion was carried.

The incoming President was instructed to present to the County Board the names of four of our members from which they are to choose two to serve on an advisory committee of Child Welfare.

A case of death from a generalized carcinomatosis of the retroperitoneal tissues in a man eighty-one years of age two years and four months following a prostatectomy without any signs or symptoms of its existence either in the weight, color, muscular tone, gastrointestinal or urinary function and exhibiting

only a subjective complaint of abdominal pain was reported by Dr. J. F. Wilkinson.

Some interesting motion picture films of Mexico taken by Dr. A. W. Rogers were shown by Dr. James C. Hassall.

An excellent venison dinner was then served in the dining room of the institution. Guests other than society members were Drs. Henry and John Hitz and John Garvey of Milwaukee.

Following the dinner, Dr. A. W. Rogers was introduced by President Nammacher as toastmaster and he in turn introduced Dr. John Garvey who spoke very briefly on the subject of "Psychosomatic Phenomena" and Dr. John Hitz, the speaker of the evening, who entertained us all with a very interesting and instructive talk on scientific, social and political observations made by him during his period of postgraduate study in Vienna and Berlin and his travel experiences throughout the continent.

This very interesting meeting was then adjourned. It had always been the custom of Dr. Byron Caples of Waukesha Springs Sanitarium, a former President of our State Society, to entertain the Waukesha County Society at his institution for its annual meeting in December, but because of illness Dr. Rogers volunteered to "pinch hit" for him on this occasion, with the knowledge that we will again gather at the Waukesha Springs Sanitarium in 1935.

J. F. W.

MILWAUKEE ACADEMY OF MEDICINE

Members of the Milwaukee Academy of Medicine met on Tuesday, December 18th, the following program being presented:

1. Presentation of Cases.
2. Comparative Studies on Lumbar and Cistern Cerebral Spinal Fluids by Dr. A. Levinson and Dr. D. J. Cohn, Chicago.
3. Some Modern Ideas on the Treatment of Diabetes by Dr. Solomon Strouse, Chicago.

MILWAUKEE OTO-OPHTHALMIC

The December meeting of this Society was held at the University Club on December 18th. Clinical meeting with exhibition of patients took place at six o'clock which was followed by dinner. Prof. William R. Duffy of Marquette University School of Speech gave an address on "Vocal and Speech Defects."

Other speakers on the program were Dr. Hilmer G. Martin who spoke on "An Instrument for the Determination of Maximum Convergence."

Mr. J. C. Copeland of Bausch and Lomb Company gave a demonstration of the new ophthalmological instruments.

News Items and Personals

Sixteen members of the Racine County Medical Society presented talks to the public on the subject of Tuberculosis in connection with the Tuberculosis Exhibit at Racine during November. Members participating in the program arranged by the Public Health Department included Doctors G. W. Walter, H. C. Miller, W. F. Konnak, R. D. Jamieson, B. H. Holmes, R. M. Kurten, Beatrice Jones, E. J. Schneller, T. Northey, A. M. Lindner, C. O. Schaefer, J. F. Henken, K. C. Kehl, and Commissioner of Health I. F. Thompson.

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Nine Milwaukee physicians who have been practicing for fifty or more years were honored by the Medical Society of Milwaukee County at a dinner at the Athletic Club on December 4th. The physicians are: W. H. Washburn and J. W. Fisher, who have been practicing 57 years; James Cavaney, 55 years; Charles Zimmerman, 54 years; Leopold Schiller, 52 years; A. J. Puls, 51 years; William Jobse, J. A. Bach and William Sweemer, 50 years.

Congratulatory addresses were given by Dr. Rock Sleyster, Wauwatosa, trustee of the American Medical Association; Dr. Eben J. Carey, dean of Marquette University School of Medicine; Dr. Charles R. Bardeen, Madison, dean of University of Wisconsin Medical School; Dr. T. J. O'Leary, Superior, President of the State Medical Society of Wisconsin; Dr. Charles Fidler, President of the Medical Society of Milwaukee County.

Dr. J. A. Bach responded with a talk on "My Fifty Years in Medical Practice."

Dr. Arthur T. Holbrook of Milwaukee presided.

Entertainment and songs concluded the celebration.

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The following newly licensed physicians in Wisconsin have opened offices:

Dr. Walter C. Kleinpell, who is specializing in the diseases of eye, ear, nose and throat, has opened an office in the Beaver building, Madison.

Dr. Michael F. Ries has established his office at Fairwater, in the building formerly occupied by Dr. R. H. Buckland.

—△—

Dr. Max W. Trentzsch of Highland has resumed his practice after an absence of several months. Dr. Trentzsch received a fractured ankle in a fall and because of complications was removed to a Dodgeville hospital.

Dr. E. A. Pohle, Madison, attended the 20th annual meeting of the Radiological Society of North America at Memphis, Tennessee from December 3rd to 7th. On Monday morning he and Dr. Gorton Ritchie, also of Madison, presented a paper on "Roentgen Therapy in Wilms' Tumor of the Kidney; with a Report of Six Cases." On Monday and Tuesday afternoons Dr. Pohle held clinics on "Radiation Therapy of Leukemia and Allied Disease."

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Dr. Reginal H. Jackson was elected President of the Western Surgical Association at the 44th annual meeting of the Society which was held at St. Louis on December 7th and 8th.

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Accepting the suggestion of Dr. John M. Dodd, mayor of the city of Ashland, the city council voted to have the city finance tonsillectomies for school children during the Christmas holidays. About fifty of the 2500 school children needed the operation, it was pointed out.

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Dr. C. O. Lindberg, formerly of Sawyer, Michigan, returned to Grantsburg, Wisconsin, to become chief-of-staff of the Community Hospital to fill the vacancy caused by the death of Dr. J. E. Johnson. Dr. Lindberg formerly held this position at Grantsburg before going to Sawyer.

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The Southeastern Surgical Congress, through its secretary, Dr. B. T. Beasley, announces the sixth annual assembly of the Congress which will be held in Jacksonville, Florida, March 11, 12 and 13, 1935. The Congress has met previously in Atlanta, Birmingham and Nashville.

The states composing the Congress are Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee and Virginia.

For information address Dr. B. T. Beasley, Secretary–Treasurer, 1019 Doctors Building, Atlanta, Georgia.

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Dr. and Mrs. Wayne F. Cowan of Stevens Point returned the middle of December from a southern motor trip of six and one-half weeks. Dr. Cowan, who had been ill this fall, has completely recovered and will resume his practice.

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Dr. I. N. McComb of Brillion celebrated his 85th birthday anniversary recently. He has been practicing in Brillion for nearly sixty years.

MARRIAGES

Dr. Frank D. Weeks of Ashland and Miss Frances Mary Clark of Janesville on November 30th.

Dr. Leland Pomainville, Wisconsin Rapids, to Miss Margaret Currier, Port Edwards, at Sauk City, November 24, 1934. After a wedding trip through the southern states Dr. and Mrs. Pomainville will be at home, 1040 Fourth Street South, Wisconsin Rapids.

BIRTHS

A daughter to Dr. and Mrs. Dewitt C. Beebe, Sparta, on November 16, 1934.

A son to Dr. and Mrs. Benjamin Lieberman, Milwaukee, on November 21, 1934.

A son to Dr. and Mrs. Robert Krohn of Black River Falls on December 7th.

DEATHS

Dr. B. F. Bellack of Columbus died on November 22nd after an illness of several months.

Dr. Bellack was born in Watertown on February 21, 1862. Following graduation from high school he went to Chicago to work for a commercial firm and later went into business with his brother, A. M. Bellack in Chicago. The firm moved to Columbus three years later, but after a few years Dr. Bellack decided to study medicine and in 1887 entered the College of Physicians and Surgeons of Chicago from which he graduated in 1890. Following internship, he came to Columbus and opened an office in 1891. A few years later he spent a year in postgraduate study abroad. In 1907 he built and equipped the Columbus Hospital.

Dr. Bellack was a member of the Columbia County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow, one daughter, two brothers and two sisters.

Dr. A. J. Schweichler, Milwaukee, died on December 4th at his home. He had retired twelve years ago after fifty years of practice.

Dr. Schweichler was born in Koenigsberg, Prussia, in the year 1847, and obtained his medical education at the University of Berlin from which he graduated in the year 1872. He came to America immediately thereafter, where he worked as a druggist's apprentice in Milwaukee. He also practiced at Sheboygan, then at Manitowoc, and returned to Milwaukee to establish his practice there.

Besides his widow, he is survived by two sons.

Dr. Samuel H. Lippitt, Milwaukee, died suddenly on December 7th of heart disease at his apartment in the Astor Hotel.

Dr. Lippitt was born in Ukraine, Russia, in the year 1886 and migrated to the United States forty-five years ago. He was a graduate of George Washington University School of Medicine in the year 1915 and came to Milwaukee the same year. Since 1919, Dr. Lippitt taught at Marquette University School of Medicine as associate clinical professor of pediatrics. At the time of his death, he was director of the Mount Sinai Dispensary and senior pediatrician at the hospital.

He was a member of the Medical Society of Milwaukee County, the State Medical Society, and the American Medical Association. For many years Dr. Lippitt served as a member of the House of Delegates. He was also a member of the Milwaukee

Academy of Medicine and the American Academy of Pediatrics.

He is survived by his widow, Dr. Eleanore Cushing-Lippitt, and two sisters.

Dr. A. B. Jensen, Menasha, died suddenly at his home on December 14th.

He was born at Chilton, Wisconsin, December 14, 1879. He was a graduate of University of Illinois College of Medicine in the year 1903 and practiced in South Chicago for six months before coming to Colby, Wisconsin. He remained there five years and then left for Europe for six months postgraduate work. Returning to this country he came to Menasha to establish his practice.

Dr. Jensen was a member of the Winnebago County Medical Society, the State Medical Society, and of the American Medical Association.

He is survived by his widow; two sons, Dr. Frederick Jensen of Menasha and Richard of New York City; one brother and three sisters.

Dr. A. C. Borchardt, New London, died on December 16th following an illness since 1931.

Dr. Borchardt was born in Caledonia on March 3, 1872. He was a graduate of Milwaukee Medical College in the year 1874 and came immediately to New London to open an office. He served as city health officer for seventeen years. During the World War, Dr. Borchardt was stationed at Fort Riley and Camp Pike, Arkansas. In 1925 he built the Memorial Clinic at New London of which he was in charge up to the time of his death.

He is survived by his widow, three sons, Dr. Melvin A., Rubin and Elmer, and one daughter.

SOCIETY RECORDS

New Members

Anna M. Wenzel, Board of Trade Bldg., Superior.
Clement L. Lacke, 2003 Winnebago St., Madison.
A. W. Neutzman, Mosinee.
F. D. Weeks, Ashland.
Stanley R. Miller, 306 Main St., Stevens Point.
R. H. Dunn, Rosholt.
George Griswold, Alma Center.
Palmer W. Good, 723—58th St., Kenosha.
Wm. F. Konnak, 1406 Douglas Ave., Racine.
Leo M. Lifschutz, 816—16th St., Racine.
E. K. Steinkopff, Statesan, Wis.
Marshall P. Stamm, 5831 W. National Ave., West Allis.
Adolph L. Natenshon, 208 E. Wisconsin Ave., Milwaukee.
Lester E. Haushalter, 3320 N. Green Bay Ave., Milwaukee.
Wm. T. Casper, 2200 N. Third St., Milwaukee.
Paul M. Golley, 421 E. Silver Spring Dr., Milwaukee.
Donald F. Rikkers, 3702 N. Teutonia Ave., Milwaukee.
Wm. D. Coventry, 425 E. Wisconsin Ave., Milwaukee.
Paul A. Lee, 2423 W. Villard Ave., Milwaukee.
John A. Cox, 2650 W. Fond du Lac Ave., Milwaukee.
Frank J. Kozina, 3108 S. Kinnickinnic Ave., Milwaukee.
Raymond H. Quade, 408 W. Greenfield Ave., Milwaukee.
Arthur C. Bachus, 3728 N. 22nd St., Milwaukee.
G. J. Gumerman, 3513 W. Villard Ave., Milwaukee.
A. L. Kyllo, 5719 Tower Ave., Superior.
H. O. Delaney, Beloit.
F. M. Frechette, 500 W. Milwaukee St., Janesville.
S. A. Freitag, 500 W. Milwaukee St., Janesville.
M. M. Baumgartner, Pember-Nuzum Clinic, Janesville.
F. R. Zietlow, Genesee Depot.

Change of Address

A. G. Kammer, Belleville to Montreal Mining Co., Montreal, Wis.

CORRESPONDENCE

"VERY FINE COOPERATION"

Wisconsin Emergency Relief Administration
149 East Wilson St.
Madison, December 1, 1934.

Mr. George Crownhart, Secretary,
State Medical Society,
Madison, Wis.

Dear Mr. Crownhart:

I received a copy of the bulletin issued by the State Medical Society on Authorized Medical Relief, and wish to express my appreciation for the keen interest in the relief program shown by the Society in issuing a bulletin of this kind, and the very fine cooperation from them at all times.

I might add that Miss Foster was in town a few days ago and expressed her approval of the bulletin and was very much pleased with the attitude taken by the doctors participating in the relief program.

Very sincerely yours,
Alfred W. Briggs,
Acting Administrator.

EXAMINERS APPOINTED

Five vacancies on the State Board of Medical Examiners were filled by Governor A. G. Schmedeman on December 21st. Those appointed to the Board are:

1. Dr. H. P. Bowen, Watertown.
2. Dr. C. W. Giesen, Superior.
3. Dr. J. R. Venning, Fort Atkinson.
4. Dr. A. G. Koehler, Oshkosh.

The present osteopathic member of the Board, Dr. E. C. Murphy of Eau Claire, was reappointed by the Governor.

Governor La Follette will have four appointments to make on July first, next. Terms that expire at that time are those of Dr. J. E. Guy of Milwaukee; Dr. H. J. Gramling of Milwaukee; Dr. R. E. Flynn of La Crosse and Dr. J. R. Venning of Fort Atkinson.

The Woman's Auxiliary

Mrs. Rock Sleyster, 1220 Dewey Ave., Wauwatosa, *President*
Mrs. F. Gregory Connell, 420 Washington Blvd., Oshkosh, *President-elect*
Mrs. George H. Ewell, 2024 Kendall Ave., Madison, *Secretary*
Mrs. Donne F. Gosin, 631 S. Quincy Ave., Green Bay, *Treasurer*
Mrs. R. W. Tomlinson, 1021 Park Place, Wilmington, Del., *National President*

Hygeia in Every School by Dane County Auxiliary

TWO hundred twenty-five subscriptions to Hygeia for practically every school in Dane County was the achievement of the Auxiliary to the Dane County Medical Society in December. Through the efforts of the retiring president, Mrs. Reginald Jackson, Madison, and the County Hygeia chairman, Mrs. Lester McGary, Madison, and with the cooperation of the membership, the plan to increase the circulation of Hygeia in schools was perfected. Every school in the county which had not subscribed to Hygeia received a gift subscription to this authentic health publication. Six month subscriptions beginning with the December issue were placed as follows:

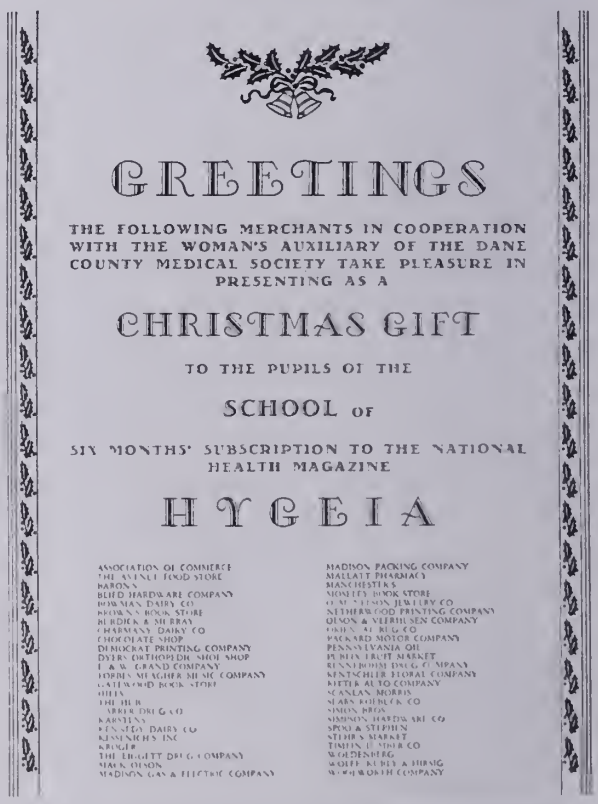
202 rural and state raded schools
18 parochial schools (Catholic and Lutheran)
5 high schools in City of Madison

225

This project was made possible by contributions from merchants of Madison. In recognition of their kindness the Auxiliary had the names of the merchants printed on a Christmas card which was sent to each of the 225 schools. A copy of the December issue of Hygeia was presented to each of the forty-eight merchants who contributed to this health educational project.

In addition to the subscriptions placed in schools, fifty-two personal (8 month) subscriptions were secured by the Auxiliary.

Before proceeding with the project of placing Hygeia in schools the approval of the Advisory Council was obtained; then the plan was presented to the two county superintendents of schools and the Madison School Board who readily gave their consent. Before contacting the merchants the permission of the Director of the Association of Commerce was secured,—he signified his approval by subscribing to Hygeia.


GREETINGS

THE FOLLOWING MERCHANTS IN COOPERATION WITH THE WOMAN'S AUXILIARY OF THE DANE COUNTY MEDICAL SOCIETY TAKE PLEASURE IN PRESENTING AS A

CHRISTMAS GIFT

TO THE PUPILS OF THE

SCHOOL OF

SIX MONTHS' SUBSCRIPTION TO THE NATIONAL HEALTH MAGAZINE

HYGEIA

ASSOCIATION OF COMMERCE
THE AVENUE FOOD STORE
BARON'S
BLIED HARDWARE COMPANY
BOWMAN DAIRY CO
BROWN'S BOOK STORE
BURDICK & MURRAY
CHARMANY DAIRY CO
CHOCOLATE SHOP
DEMOCRAT PRINTING COMPANY
DYERS ORTHOPEDIC SHOE SHOP
E & W GRAND COMPANY
FORBES MEAGHER MUSIC COMPANY
GATEWOOD BOOK STORE
GILLS
THE HUB
[illegible] DRUG CO
KARSTENS
KENSEDY DAIRY CO
KESSENICH'S INC
KROGER
THE LIGGETT DRUG COMPANY
MACK OLSON
MADISON GAS & ELECTRIC COMPANY
MADISON PACKING COMPANY
MALLATT PHARMACY
MANCHESTER'S
MOSELEY BOOK STORE
[illegible] JEWELRY CO
NETHERWOOD PRINTING COMPANY
OLSON & VEERHUSEN COMPANY
[illegible] CO
PACKARD MOTOR COMPANY
PENNSYLVANIA OIL
PUBLIC FRUIT MARKET
RENNEBOHM DRUG COMPANY
RENTSCHLER FLORAL COMPANY
RITTER AUTO COMPANY
SCANLAN MORRIS
SEARS ROEBUCK CO
SIMON BROS
SIMPSON HARDWARE CO
SPOO & STEPHEN
STEHR'S MARKET
TIMPIN [illegible] CO
WOLDENBERG
WOLFF KUBLY & HIRSIG
WOOLWORTH COMPANY

Reduced fac-simile of card presenting HYGEIA to Dane County schools. Card was printed in red and green and name of school and district was inserted by pen.

The officers of the State Auxiliary commend this unique plan of the Dane County Auxiliary. To have placed Hygeia in schools is a splendid accomplishment. Dane County Auxiliary which has been organized a little more than one year can be justly proud of its achievement.

A Resume of a Year's Work of the Woman's Auxiliary in Milwaukee County

By MRS. J. GURNEY TAYLOR
Retiring President

MILWAUKEE County is most fortunate in having a large and interested membership. From the first days of organization, three years ago, there has been perfect cooperation in every project undertaken. Three-fifths of the eligible number of wives of members of the County Medical Society have joined the Auxiliary, due largely to very active membership committees which have been most anxious to increase the membership and have worked faithfully toward that end.

At our monthly luncheon meetings the attendance is usually about one hundred and fifty (150), and the programs are of an educational nature, but we try to leaven them with subjects of general interest, such things as musical programs given by some of our artist members and committee reports which show that definite achievements have been attained, but in the last analysis we are organized for a serious purpose and are interested in progressing toward one goal which is self-education. These reports include the importance of placing HYGEIA before the public, the work of the Public Relations Committee and interesting reviews of some feature of the Bureau of Investigation of the American Medical Association—all live topics.

Public Relations is one of the Committees most valuable in the Auxiliary in its position as a liaison between the Medical Society and lay organizations. Its importance in our group has been demonstrated by the number of speakers from the Speakers' Bureau of the Medical Society placed before lay groups in the city. More than 100 physicians have spoken on medical topics in the past year to deeply interested audiences. Contacts for these talks have been made by members of the Public Relations Committee. These accomplishments are due to a conscientious effort and desire on the part of the Committee members to be of service to our organization.

The HYGEIA committee was given a quota of sixty subscriptions for the year and, determined to exceed that number, earnestly set to work with the result that a total of one hundred twenty-five subscriptions were sent in, many of which were placed in schools and public reading rooms.

Some of our members have expressed themselves as not being very enthusiastic about magazine canvassing or about the magazine itself, but that may be because they are not familiar with the reason for our interest in it or with the contents of Hygeia. Hygeia is especially important as a means of spreading news of the valuable discoveries which members of the medical profession have spent their lives in making. It is valuable not only to those who are active workers in the field of health but to every individual who realizes the increased importance of mental and physical health. The physician is interested in Hygeia because, since he is a member of the American Medical Association, it is his project and because he probably has no better method of giving the layman in his own community the information contained in this publication. Woman's Auxiliaries are endeavoring to assist the doctor in the constructive educational work carried on by Hygeia by promoting its circulation.

The House of Delegates of the American Medical Association and the Council of the State Medical Society have asked the Woman's Auxiliary to assist them in their program of education of the lay public carried on through the health magazine, Hygeia, concerning the work of the medical profession in the prevention and cure of disease.

We do not overlook the value of social entertainments, for by a friendly spirit thus established we accomplish one of the objectives for which we are organized, but nearly all social activities such as dances, teas, bridge benefits and picnics are sponsored entirely by the social and other committees and are held at intervals between regular monthly meetings.

A new feature which is just being developed is a Public Welfare Committee. This Committee is formed for the purpose of acquainting the members with organized public welfare agencies in the city. Tours will be made of several agencies during the year, thus giving those interested an opportunity to become familiar with their aims and purposes. We are fortunate in having splendid cooperation with our Medical Society. Most Medical Societies are beginning to realize that under wise guidance interested and informed Auxiliaries may prove powerful allies.

Our own feeling is perfectly expressed by the following excerpt from an article by one of the National past presidents: "It is with a joyous thrill of pride we all see our organization pressing on, reaching out and proving worthy of the high confidence and trust granted us by our State and County Medical Societies."

COUNTY NEWS ITEMS

DANE COUNTY

The Woman's Auxiliary to the Dane County Medical Society sponsored an open meeting in November. Dr. Frank L. Rector, Field Representative of the American Society for the Control of Cancer addressed the group on the subject of "The Life History and Growth of Cancer and the Methods for its Prevention and Control."

The December meeting of the Dane County Auxiliary was held at the home of its incoming president, Mrs. Arthur Sullivan, Madison. The luncheon was largely attended. Election of officers was held. The committee chairmen presented interesting reports. The outgoing president, Mrs. Reginald Jackson, presented the Auxiliary with an engraved gavel.

DOUGLAS COUNTY

The November meeting of the Woman's Auxiliary to the Douglas County Medical Society was held at the Androy Hotel, Superior. There was an interesting discussion on quackery. Mrs. George Hathaway read an article showing the very widespread practice of quackery in the treatment of arthritis, neuritis, and allied diseases. Mrs. J. H. Weisberg followed with an article from the November issue of Hygeia.

GREEN LAKE–WAUSHARA–ADAMS COUNTY

The Green Lake–Waushara–Adams County Auxiliary with a membership of eight have joined in the campaign of the State Auxiliary to increase the subscriptions to Hygeia. Mrs. Burt E. Scott of Berlin is actively engaged in acquainting the public with the health magazine.

MANITOWOC COUNTY

Professional cares were relegated to the background on the evening of December sixth in obedience to the admonition on the invitation

"Let's hope no ailing patient
Will make you stay away."

The invitation was sent by the Woman's Auxiliary to the physicians of Manitowoc County Medical Society. The affair for which the invitations were issued was a dinner party at Polifka's, Manitowoc, at which the auxiliary members were hostesses, and their husbands were guests. A series of ten games were arranged as entertainment. This was the largest gathering of the medical society and auxiliary members ever held by the county group.

A luncheon meeting of the Auxiliary was held on December 12th at the Catholic Community Center, Manitowoc. The guest speaker was Dr. F. W. Hammond, Manitowoc, whose subject was "The History of Anaesthesia." Election of officers was held and Mrs. Alfred P. Zlatnik, Two Rivers, took office as president.

MARINETTE–FLORENCE COUNTY

A successful charity card party was held in the Crystal room of the Hotel Marinette on November ninth under the auspices of the Woman's Auxiliary to the Marinette–Florence County Medical Society, the proceeds of which were turned over to the public health and clothing fund. One hundred fifty people attended the charity party.

The Auxiliary, desiring to aid and inform the public on matters of health, are putting on a "Mile of Pennies campaign" and are inviting all to contribute the widow's mite in a worthy cause. Penny banks have been placed in drug stores and restaurants. The Auxiliary desires to place Hygeia in every school in the county. Marinette–Florence County Auxiliary is also desirous of broadening its activities by providing clothing where needed.

MILWAUKEE COUNTY

Dr. William C. Woodward, Director of the Bureau of Medical Legislation of the American Medical Association, gave a most interesting talk telling how legislative measures are prepared and presented for adoption. The November meeting of the Auxiliary to the Medical Society of Milwaukee County was held at the Y. W. C. A. The Auxiliary was happy to have Mrs. Woodward as a guest and she very graciously brought a message from some of the auxiliaries on the west coast where she has been visiting.

On November 20th a benefit bridge party and tea was held at the College Women's club. Proceeds were added to the auxiliary's general fund for charitable and educational work.

The third annual meeting of the Woman's Auxiliary to the Medical Society of Milwaukee County was held on December 14th at the Y. W. C. A. Mrs. Harry J. Heeb took office as president.

The Auxiliary was very happy to have as guests the Advisory Council from the Medical Society, one of whom, Dr. James C. Sargent, addressed the meeting on "The Role of Medicine in Public Health."

The annual reports of officers and committee chairmen stated the membership at present to be 336; 115 speakers have been placed before lay organizations during the year; 124 subscriptions to Hygeia have been sold; and 79 notes and 5 bouquets of flowers have been sent to members who were ill. Four new committees were organized—the Budget Committee, Educational Committee, Philanthropic Committee, and Public Welfare Committee.

The Educational Committee reported that during one week 34 ads for patent medicines were clipped from a prominent Milwaukee newspaper and sent to the Advertising Manager of that paper with the result that only 20 of these ads have since reappeared in that paper.

The retiring president, Mrs. J. Gurney Taylor, presented the gavel to the incoming president, Mrs. Harry Heeb, who made a very inspiring resume of her plans for the work in the new year.

A very interesting musical program was given by members of the International Opera Association who presented "Babes in Toyland" at the Davidson Theatre on December 28th and 29th under the direction of Mrs. Louis Warfield, one of the Auxiliary members.

PORTAGE COUNTY

A meeting of the Portage County Auxiliary was held at the home of Mrs. Austin G. Dunn, Stevens Point. A resume of the presidential address given by Mrs. Rock Sleyster at the Green Bay meeting was presented by Mrs. G. W. Reis of Junction City. Mrs. G. H. Lawrence of Stevens Point reviewed an article, "Food Fads and Faddists," which appeared in the October issue of Hygeia.

RACINE COUNTY

On November 6th approximately thirty-four members and guests of the Racine County Auxiliary enjoyed luncheon at St. Luke's Hospital preceding a lecture in the hospital library, attended by a much larger group. The speaker was Dr. Frank L. Rector, field representative of the midwest section of the American Society for the Control of Cancer. In a brief business meeting following the talk, the auxiliary heard a report to the effect that its recently sponsored Girl Scout troop has reached a membership of twenty-four.

The December meeting was in the nature of a social afternoon in keeping with the Christmas season. Elections were held and Mrs. F. W. Pope, Racine, assumed the office of president. Mrs. L. E. Fazen, the retiring president, was presented flowers and paid tribute for her fine accomplishments during the past year.

SHEBOYGAN COUNTY

The Woman's Auxiliary to the Sheboygan County Medical Society held its monthly luncheon meeting at Pfeiler's Restaurant on December 5th. Mrs. Raymond Meyer of Plymouth was elected President. After a short business meeting the members went to the home of Mrs. Fred Nause where bridge was played for the remainder of the afternoon.

WAUKESHA COUNTY

The November meeting of the Auxiliary to the Waukesha County Medical Society was held at the home of Mrs. W. H. Oatway of Waukesha. The speaker of the occasion was Miss Dorothy Durbin of the Wisconsin Anti-Tuberculosis association. Mrs. Hans Schneider gave two piano selections. Mrs. Oatway and Mrs. U. J. Tibbits were hostesses at dinner following the meeting.

The Auxiliary held its December meeting at the Majestic Hotel, Oconomowoc. Mrs. J. C. Hassall of Oconomowoc was hostess at the meeting and dinner which followed.

Mrs. Rock Sleyster, Wauwatosa, president of the state auxiliary; Mrs. Eben J. Carey, Milwaukee, past president of the state auxiliary, and Mrs. Irwin Schulz, Wauwatosa, state Hygeia chairman, were guests of honor at the dinner meeting.

WINNEBAGO COUNTY

The October meeting of the Winnebago County Auxiliary was held at Stein's tea room, Oshkosh, with the Sheboygan County Auxiliary members as guests. Twelve members from Sheboygan were present. Following a luncheon the ladies visited the Museum.

Income Tax Provisions Affecting the Medical Profession

I. FEDERAL

LIABILITY TO FILE

Returns must be made to the Collector of Internal Revenue of the District in which the individual affected resides before March 15, 1935, at which time the tax is due and payable. In the event the taxpayer desires to pay his tax on the installment basis, the first installment of one-quarter of the tax is due on March 15, 1935, and a quarterly installment every three months thereafter, namely, June 15th, September 15th, and December 15th. A written extension of the time for filing a return can be had for cause by filing application therefor with the collector of internal revenue in the district in which the applicant resides, but such application should be made sometime before March 15th, as a penalty may be imposed for failure to file.

Responsibility for making these returns is vested in the individual. As will be noted from reading the paragraphs following, liability to make a return depends not on whether one has a tax to pay, but on the amount of his reportable income.

Under regulations effective in 1934, all persons deriving incomes from a business or profession, or both, are required to file their return upon Form 1040 (the large form). This form is also used by persons reporting an income of $5,000 or over, regardless of the nature of its source. The small form, or 1040A, is for persons who secure their incomes from wages, salaries or interest alone, and where the gross amount is less than $5,000.

The large form, or 1040, will be mailed to all Wisconsin physicians by the Collectors of Internal Revenue. If such blank is not received, apply to the Collector of Internal Revenue of the district in which you reside.

Every person having a *gross* income of $5,000 or more must file a return, regardless of the amount of of his *net* income or of his marital status. Where a husband and wife living together have an aggregate *gross* income of $5,000 or more, they must file separate returns, or a joint return, regardless of the amounts of their joint or individual *net* incomes.

All of the following persons *must* file a return where their *gross* income was less than $5,000: (1) every unmarried person and every married person not living with husband or wife, whose *net* income was $1,000 or more; (2) every married person living with husband or wife, whose *net* income was $2,500 or more. Where the aggregate *net* income of husband and wife, living together, was $2,500 or more, each may make an individual return or they may unite in a joint return.

The normal tax rate for the calendar year 1934 under the Revenue Act of 1934 is 4 per cent on the *net* income in excess of credits. Surtaxes, which are graduated, are applicable only to those individuals whose net incomes (after deduction of personal exemptions and the credit for dependents, but no other credits) exceed $4000.

If the marital status of a taxpayer changes during

the taxable year, the personal exemption shall be an amount which bears the same ratio to $1,000 as the number of months during which the taxpayer was single bears to twelve months, plus an amount which bears the same ratio to $2,500 as the number of months which the taxpayer was married and living with husband or wife, or was the head of a family, bears to twelve months. For this purpose a fractional part of a month shall be disregarded unless it amounts to more than half a month, in which case it shall be considered as a full month. Changes in the credit for dependents allowed a taxpayer are apportioned in like manner.

EARNED INCOME CREDIT

A credit against net income, for the purpose of the normal tax only, is allowed by the 1934 law, calculated at 10% of the earned net income. All net income up to $3000 is considered to be earned net income regardless of its source, and the maximum earned net income that may be considered is $14,000. Thus the maximum earned income credit allowable against net income for the purposes of the normal tax is 10% of $14,000 or $1400.

Earned net income is defined as the excess of the amount of earned income over the sum of deductions and expenses properly chargeable against or allocable to the earned income. Under the statute earned income means "wages, salaries, professional fees, and other amounts received as compensation for personal services actually rendered." In a professional occupation the taxpayer may include as earned income all professional fees even though assistants perform the services, provided the clients are those of the taxpayer.

DETERMINATION OF INCOME

The term *gross* income as applied to a physician includes the total compensation received by him during the taxable year for professional services, in whatever forms such compensation may be paid, plus the amount received in interest, rent, dividends, securities, or from the transaction of any business conducted by such physician.

The term *net* income as applied to a physician means the *gross* income computed under the above definition less allowable deductions for professional expenses. What constitutes allowable deductions will be considered in detail in the subsequent paragraphs.

The term *deduction* as applied to a physician means any amount allowable as a professional expense. Various classes of deductions are treated in detail below.

The terms *personal exemption* and *credit for dependents* have reference to the amounts allowed because of one's marital status or family obligations. These matters are treated in full detail in Instruction 22 of the income tax return blank.

ITEMS NOT REPORTABLE AS INCOME

The following items are not required to be reported because they are exempt from taxation: Allowances received under the War Risk Insurance Act; gifts, bequests, devises and inheritances; dividends on stock of federal reserve banks, land banks and intermediate credit banks; dividends from corporate earnings accumulated prior to March 1, 1913; amounts received through health, accident or workmen's compensation insurance, and damages received by the taxpayer for illness or injuries suffered by him; life insurance proceeds paid by reason of death of the insured (where a policy matures during life the amount of the proceeds, in excess of the net premiums paid, is taxable income); state court jury fees; stock dividends (i. e., issuance of its own stock by a corporation as a dividend to its shareholders); and compensation paid to its officers and employees by a state or political subdivision thereof for services rendered in connection with the exercise of an essential governmental function of the state or political subdivision.

All interest received from obligations of a state or political subdivision thereof; from securities issued under the Farm Loan Act; interest on first Liberty Loan 3½% Bonds and U. S. Bonds issued prior to September 1, 1917, and interest on the obligations of the possessions of the U. S. need not be included in the computation of *gross* income.

The following exceptions should be noted, however. Interest received on Liberty 4% and 4¼% bonds and Treasury 3%, 3⅛%, 3⅜%, 3¾%, 4%, and 4¼% bonds are exempt up to $5,000 aggregate principal. All interest received on such obligations in excess of $5,000 total holdings is reportable for surtax purposes, but is not subject to the normal tax.

PROFIT OR LOSS ON SALE OF CAPITAL ASSETS

All assets are considered to be "capital assets" except property or merchandise held by the taxpayer for sale to customers in the ordinary course of business. Thus stocks and bonds are included as capital assets.

The determination of taxable profit or deductible loss from the sale of capital assets is changed materially in the 1934 law. The taxpayer must consider on the sale of capital assets:

100% of gain or loss if the capital asset has been held for not more than 1 year.

80% of gain or loss if the capital asset has been held for more than 1 year, but not for more than 2 years.

60% of gain or loss if the capital asset has been held for more than 2 years, but not for more than 5 years.

40% of gain or loss if the capital asset has been held for more than 5 years but not for more than 10 years.

30% of gain or loss if the capital asset has been held for more than 10 years.

The resulting gains and losses should then be balanced off against one another and the net difference reported as income if a gain and as a deduction if a loss. If the net difference is a loss, a further limitation is placed thereon in that the deduction on the tax return may not exceed $2000. These matters

are treated more fully in Instruction 8 of the income tax return blank.

PERSONAL EXEMPTIONS AND CREDIT FOR DEPENDENTS

In the case of a single person, a personal exemption of $1,000 is allowed as a deduction from net income subject to tax. In the case of the "head of a family" or of a married person living with husband or wife, a personal exemption of $2,500 is allowed. If a husband and wife living together make separate returns, the personal exemption may be taken by either of them or divided between them, but may not exceed $2,500 in the aggregate.

A credit of $400 is allowed for each person, other than husband or wife, dependent upon and receiving his *chief* support from the taxpayer, if such dependent person is under 18 years of age, or is incapable of self-support because mentally or physically defective.

PUBLICITY OF TAX RETURNS

The present Revenue Act provides for the publicity of income tax returns, and, accordingly, it will be necessary for each taxpayer to file certain information called for on Form 1094, which will be mailed out to each taxpayer filing an income tax report. File Form 1094 with your return. In case of any failure to file with a return, this Form 1094, it will be necessary for the Collector of Internal Revenue to prepare such form, and $5.00 will be added to the tax.

INDEX TO DEDUCTIONS

An index of deductions which will be allowed on the tax return, some of which are peculiar to physicians, are listed below. The number given after each heading refers to the paragraph numbering on the pages following. The paragraphs explain in detail how to arrive at the deductions and depreciation.

Automobiles (1)
- Depreciation.
- Insurance (1), (11-b).
- Maintenance.
- Professional use.
- Repairs.
- Salary of chauffeur.

Bad Debts (2)
Bandages (4)
Depreciation
- Automobiles—25% annually on cost price. (1)
  - Classification includes snowmobiles and other motive equipment.
- Instruments (4)
  - 20% annually on cost of surgical instruments and general equipment; 25% on cost of x-ray equipment.
- Medical Library (3)
  - 10% annually of cost price.
- Office equipment (5)
  - 10% annually of cost price.

Dues (7)
Equipment (4)
- Both long and short-lived.

Fire Losses (11-d)
- Professional equipment and other property.

Insurance Premiums
- Automobile (1)
- Malpractice (11-b)
- Professional Equipment (11-b)

Laboratory Materials and Expenses (4) (11-c)
Law Suits (11-a)
Library (3)
Licenses (8)
Medical Meetings (9)
Medical Supplies (4)
Office Expenses (5)
- Heat, light, supplies, telephones, water, short-lived office equipment, annual depreciation on furnishings and fixtures.

Office Rental (6)
Post-Graduate Studies (9)
Professional Dues (7)
- County Society.
- State Society, $12.
- Special Societies as:
  - College of Surgeons
  - College of Physicians
- Any other paid in interest of profession.

Professional Subscriptions (7)
Salaries (10)
Scientific Meetings (9)
Sale of Spectacles (11-e)
Taxes and Licenses (8)
- Automobile license.
- State taxes on gasoline and oil required for professional use of car.
- License to prescribe alcohol.
- Occupational tax.
- Re-registration fees.
- U. S. Narcotic tax.
- Taxes on equipment or materials required in professional work.

Theft of Professional Equipment (11-d)
Travelling Expenses (9)
- Both professional calls and scientific meetings.

Wages and Salaries (1) (10) (11-c)
- Chauffeur (1)
- Clerk (10)
- Laboratory assistant (10) (11-c)
- Maid (10)
- Nurse (10)
- Stenographer (10)
- Any other employee rendering service in connection with taxpayer's practice or in the care and treatment of patients. (10)

DEDUCTIONS ALLOWABLE

1. Automobiles

The cost of operation and maintenance of an automobile used in making professional visits is deductible. These costs include gasoline, oil, tires, insurance, repairs, garage rental, and depreciation. If the same car is used for both professional and personal purposes, only such part of the maintenance as arises out of the use for professional purposes is

deductible. Sums spent for taxi, bus, or railroad fare, while on professional calls, is deductible.

Depreciation is also deductible and is based upon the estimated useful life of the car. If that period be 4 years, 25% depreciation based on cost price may be taken annually for 4 years. What has been said with respect to automobiles applies to other motive equipment.

2. Bad Debts

If the physician's books are kept according to the "Cash Receipts and Disbursements" system, he may not charge off any unpaid debts because "if his books are kept according to this system, he is only reporting as gross income those accounts which have proved to be good and therefore bad accounts cannot be deducted because they have already been excluded."

If the books are kept upon an "accrual basis" (that is, on the basis of expenses actually incurred and payable even though not yet paid, or income earned although not yet collected), it is permissible to charge off all debts which have been definitely ascertained to be worthless, and have been charged off on the books or records, during the fiscal year covered by the report. *We urge all members who may be keeping accounts on the "accrual basis" to secure permission to change to a cash basis.*

3. Library

Most physicians maintain a professional library. Taken as a whole it is doubtful whether the useful life of such a library exceeds ten years. Accordingly annual depreciation equal to 10% of the cost of such library may be deducted.

4. Medical Supplies and Instruments

Medicines used in the physician's office to treat patients, bandaging, laboratory materials, and all other medical supplies required for the operation of a physician's office may be deducted as necessary expenses, as may equipment, the life of which is less than one year. The average useful life of surgical instruments and equipment generally is estimated at 5 years which means that 20% of the cost may be taken as annual depreciation. X-ray equipment may be depreciated at 25% of cost annually.

5. Office Expense

General office expense is deductible. Among the principal items are heat, light, office supplies, telephone rentals, water, office equipment having a useful life of a year or less, and depreciation on office furnishings and fixtures. Ten per cent of original cost is a reasonable average depreciation rate for office equipment, furnishings and fixtures.

6. Office Rent

If a physician pays rent to another person for office space, he is permitted to deduct the amount from his gross income. This includes regular office space in a rented home provided office hours are maintained there. Where a physician maintains his offices in a rented home he may deduct as rental expense only that proportion of the total rent paid which his office space bears to the entire house. If he owns his home and maintains an office in it, he cannot claim a deduction for office rent.

7. Professional Dues

Dues paid to professional associations to which he belongs in the interest of his profession are deductible. Subscriptions to all medical journals or scientific publications are likewise deductible.

8. Taxes and Licenses

Any taxes paid upon materials required in professional work are exempt. All licenses which the physician is required to take out may be deducted. This includes the license to prescribe alcohol, narcotic license, automobile license, local occupational and reregistration taxes, and state taxes on gasoline and motor oil for professional use of car.

9. Traveling Expenses

Traveling expenses necessary for professional visits to patients are deductible. Traveling expenses in bona fide attendance upon scientific meetings are deductible. The expenses of attending post-graduate medical courses are *not* deductible, however.

10. Wages and Salaries

Deductions are permitted for the salary of a nurse, laboratory assistant, stenographer or clerical worker employed in the office so long as the duties of such persons are in connection with the physician's professional work. Wages paid to maids taking care of the office and answering the telephones are also deductible, as are any sums paid employees for services rendered in connection with the taxpayer's practice, or the care and treatment of patients.

11. Miscellaneous

(a) **Expense of Defending Malpractice Suits**—Expenses incurred in the defense of a suit for malpractice are deductible as business expense. Expenses incurred in the defense of a criminal action, however, are not deductible.

(b) **Insurance Premiums**—Premiums paid for insurance against professional losses are deductible. This includes insurance against damages for alleged malpractice, against liability for injuries by a physician's automobile while in use for professional purposes, and against loss from theft of professional equipment, and damage to or loss of professional equipment by fire or otherwise. Under professional equipment is to be included any automobile belonging to the physician and used for strictly professional purposes.

(c) **Laboratory Expenses**—The deductibility of the expenses of establishing and maintaining laboratories is determined by the same principles that determine the deductibility of other corresponding professional expenses. Laboratory rental and the ex-

penses of laboratory equipment and supplies and of laboratory assistants are deductible when, under corresponding circumstances, they would be deductible if they were part of a physician's general office expense.

(d) **Losses by Fire, Theft, etc.**—Loss of and damage to a physician's equipment by fire, theft or other cause, *not compensated by insurance or otherwise recoverable*, may be computed as a business expense and is deductible, provided evidence of such loss or damage can be produced. Such loss or damage is deductible, however, only to the extent it has not been made good by repair and the cost of repair claimed as a deduction. Deductions may likewise be taken for loss of or damage to *non-professional* property of a physician caused by fire, flood, theft or otherwise, *where not compensated for by insurance or otherwise recoverable.*

(e) **Sale of Spectacles**—Oculists who furnish spectacles, etc., may enter as income money received from such sales and deduct as an expense the cost of the article sold. Entries on the physician's account books should, in such cases, show charges for services separate and apart from charges for spectacles.

II. STATE

The information herein contained is based upon the Wisconsin Statutes, 1933, Laws of Wisconsin, 1933, Rules and Regulations of the Wisconsin Tax Commission under the Income Tax Act of 1931, published September, 1932, and the forms to be used in making 1934 returns. It should be noted that the three-year average feature is no longer operative; that there have been no changes in personal exemptions or credits for dependents, nor in normal tax or teachers' retirement fund surtax rates; that the Emergency Income Tax Act of 1933 was effective for that year only. Principal legislative changes enacted during 1935 will be subsequently considered.

LIABILITY TO FILE

Returns of 1934 income must be made to the assessor of incomes of the district in which the taxpayer resides, on or before March 15. A written extension of the time in which to file may be granted for cause, but may not exceed 30 days.

Every person, including emancipated minors under 18 and minors 18 to 21, who received a net income of $800 or more, if single, and $1600 or more if married, must file a return whether notified to do so or not.

The normal tax, which is graduated, varies from 1 per cent on the first $1000 of net income to 7 per cent on net incomes in excess of $12,000. The teachers' retirement fund surtax is based on 1/6 of normal taxes after deducting $37.50 from the gross surtax.

In general, the definitions contained in the preceding federal income tax digest are applicable as well to state taxes.

INSTRUCTIONS ON THE FILING OF SEPARATE INCOME TAX RETURNS FOR HUSBAND AND WIFE

Section 71.09 (4) (c) requiring that the incomes of husbands and wives be combined for assessment purposes has been held unconstitutional by the United States Supreme Court. To give effect to this decision the Tax Commission has adopted the following regulations:

1. Wives must file a separate return on Form 1B if they have income of their own, but in case they have no income no return need be filed.

2. In the event that both husband and wife have income and file separate returns, the personal exemption of $17.50 will be divided between the two according to their own choice, that is to say, the husband may claim it all, or the wife may claim it all, or they may divide it between them as they see fit.

In the event that they express no choice in the matter of the division of the personal exemption, the assessor of incomes shall divide it between them so as to give them the full benefit of the deduction. To illustrate, assume the husband has an income of $2,000.00 and the wife an income of $500.00, and they express no choice as to the division of the personal exemption. The assessor of incomes will apply $5.00 of their personal exemption against the wife's return, thereby wiping out the tax on her entire income, and apply the remaining $12.50 against the tax of the husband.

3. The income of children under eighteen years of age shall be included in the return of the husband or head of the family, and the personal exemptions for such children shall likewise be allowed to the husband or the head of the family, unless it can be established to the satisfaction of the assessor that they are in fact being supported by the wife, in which event the wife will be entitled to deduction for the personal exemptions of the children.

PERSONAL CREDITS AND EXEMPTIONS

The statutes themselves are so clear as to personal exemptions, credits for dependents, and the date determining the personal status of a taxpayer for income tax purposes that they are quoted here in full:

"71.05 *Exemptions.*

(1) There shall be exempt from taxation under this chapter income as follows, to-wit:

EMERGENCY SURTAX POSSIBLE

The Wisconsin legislature meets the second week in January. It seems probable that before the session adjourns an emergency surtax may be assessed for relief purposes. If the procedure of four years ago is followed, the 1935 state income tax return will be used for determining the amount of the emergency surtax.

(a) Pensions received from the United States.

(b) All inheritances, devises, bequests and gifts received during the year.

(c) All insurance received by any person or persons in payment of a death claim by any insurance company, fraternal benefit society, or other insurer, except insurance paid to a corporation or partnership upon the policies on the lives of its officers, partners or employes.

* * *

(2) There shall be deducted from the tax after the same shall have been computed according to the rates in section 71.06, a personal exemption for natural persons as follows:

(a) For an individual, eight dollars.

(b) For husband and wife or head of a family, seventeen dollars and fifty cents. For the purposes of this chapter, the term "head of a family" means a natural person who maintained a household and supported therein himself and one or more persons who were dependent upon him for support; but no additional exemption shall be allowed for those dependent upon the head of a family except in case of a widow or widower supporting children under the age of eighteen years.

(c) For each child under the age of eighteen years who is actually supported by and dependent upon the taxpayer for his support, an additional four dollars.

(d) For each additional person, except persons defined in subsection (2) (c) of section 71.05, who is actually supported by and entirely dependent upon the taxpayer for his support an additional four dollars, except in case of head of a family. In computing taxes and the amount of taxes payable by persons residing together as members of a family, the income of the wife and the income of each child under eighteen years of age shall be added to that of the husband or father, or if he be not living, to that of the head of the family and assessed to him except as hereinafter provided. The taxes levied shall be payable by such husband or head of the family, but if not paid by him may be enforced against any person whose income is included within the tax computation.

(e) The personal exemptions provided by this section shall be determined by the personal status of a taxpayer on the last day of the last year included in the computation of income except as otherwise provided in this chapter."

1933 LEGISLATIVE CHANGES

Among the changes in income taxation enacted by the 1933 regular session of the Wisconsin Legislature are five which are summarized here because of their applicability to physicians as well as to all other taxpayers.

1. **Back Taxes and Refunds.** The Tax Commission may conduct audits and collect back taxes at any time within 6 years after the close of the period covered by a given return, except that the Tax Commission is not barred by the lapse of any period of time in cases of evasion, fraudulent intent, or failure to file. Refunds are also obtainable by a taxpayer if he makes claim therefor within 6 years after the period for which he seeks such refund.

2. **Compromise and Payment of Delinquent Taxes.** Delinquent income taxes may be compromised by the Tax Commission, and the compromised amount including penalties and interest paid in convenient installments. This will prove highly advantageous to numbers of taxpayers now in arrears.

3. **Computation and Payment of 1933 Income Taxes.** Taxpayers are now required to compute their own income tax on the face of the return blank and to make an initial payment on or before the 15th of March unless their fiscal year varies from the calendar year. The initial payment must be the entire tax if the latter does not exceed $5.00, and must be at least ⅓ the total tax and not less than $5.00 if the tax exceeds the latter amount. The balance of the tax must be paid by August 1. A 2 per cent discount is allowed for payment in full by March 15.

The state income tax is now payable to the Tax Commission through designated representatives at the local assessor's office of the district in which the taxpayer resides.

4. **Contested Assessments.** The taxpayer who is contesting his income tax assessment may deposit the amount assessed plus interest to the first of the month following payment with the State Treasurer. If it later be determined that the taxpayer was over-assessed, the overpayment so deposited will be refunded with 6 per cent interest from the date of deposit.

5. **Emergency Gift Tax.** This law provides in brief that the donor and donee of any transfer by gift of property of any kind shall report such transfer on their respective income tax returns. Space is provided on the upper right hand column of the regular income tax blank for this purpose. The tax will be assessed by the assessor of incomes in the district in which the taxpayer resides and the taxpayer notified of the amount due, probably some time in June, 1934. The tax is imposed on transfers of property made between July 8, 1933, and July 1, 1935. The rates are graduated from 2 per cent to 8 per cent for gifts valued at less than $25,000 and

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Use of Ephedrine, Lilly, in the nose produces definite therapeutic results:

1. *Reduces congestion.*
2. *Facilitates breathing.*
3. *Improves drainage.*
4. *Diminishes absorption of toxins.*
5. *Stimulates ciliary movement.*

Prompt Attention Given to Professional Inquiries

PRINCIPAL OFFICES AND LABORATORIES, INDIANAPOLIS, INDIANA, U. S. A.

reach a maximum of 15 per cent on large transfers. The principal exemptions from the tax are: (a) payments by an employer for the benefit of his employee or the latter's family, including medical services, and (b) transfers of reasonable amounts of property to members of one's immediate family for current maintenance, support and education.

DEDUCTIONS ALLOWABLE FOR PROFESSIONAL EXPENSES

A Statute

The statute is so explicit on what constitutes allowable deductions of major items of expense that it has seemed advisable to insert portions of it for the aid of physicians making state returns.

"71.04 *Deductions From Incomes of Persons Other Than Corporations.* Persons other than corporations, in reporting incomes for purposes of taxation, shall be allowed the following deductions:

(1) Payments made within the year for wages or other compensation for services actually rendered in carrying on the profession, occupation or business from which the income is derived. But no deduction shall be made for any amount paid for services actually rendered in the carrying on of the profession, occupation or business from which the income is derived unless there be reported the name and address and amount paid each person to whom a sum of seven hundred dollars or more shall have been paid for services during the assessment year. No deduction shall be allowed under this section for any amounts expended for personal, living or family expenses.

(2) The ordinary and necessary expenses actually paid within the year in carrying on the profession, occupation or business from which the income is derived, including a reasonable allowance for depreciation by use, wear and tear of the property from which the income is derived, * * *

(3) Losses actually sustained within the year and not compensated by insurance or otherwise, provided that no loss resulting from the operation of business conducted without the state, or the ownership of property located without the state, may be allowed as a deduction, and provided further that no loss may be allowed on the sale of property purchased and held for pleasure or recreation and which was not acquired or used for profit, but this proviso shall not be construed to exclude losses due to theft or to the destruction of the property by fire, flood or other casualty. No deduction shall be allowed under this subsection for any loss claimed to have been sustained in any sale or other disposition of shares of stock or securities where it appears that within thirty days before or after the date of such sale or other disposition the taxpayer has acquired (otherwise than by bequest or inheritance) or has entered into a contract or option to acquire substantially identical property and the property so acquired is held by the taxpayer for any period after such sale or other disposition.

(4) Dividends, except those provided in section 71.02 (2) (b) 2 and 3, received from any corporation conforming to all of the requirements of this subsection. Such corporation must have filed income tax returns as required by law and the income of such corporation must be subject to the income tax law of this state. The principal business of the corporation must be attributable to Wisconsin and for the purpose of this subsection any corporation shall be considered as having its principal business attributable to Wisconsin if fifty per cent or more of the entire net income or loss of such corporation after adjustment for tax purposes (for the year preceding the payment of such dividends) was used in computing the average taxable income provided by chapter 71 * * *

(5) Interest paid within the year on existing indebtedness; provided, the debtor reports the amount so paid, the form of the indebtedness, together with the name and address of the creditor. But no interest shall be allowed as a deduction if paid on an indebtedness created for the purchase, maintenance or improvement of property, or for the conduct of a business, unless the income from such property or business would be taxable under this chapter.

(6) Taxes other than inheritance and special improvement taxes upon the property or business from which the income hereby taxed is derived paid by such persons during the year, including therein taxes imposed by the state of Wisconsin or the United States government as income taxes; provided, that such portion of the deduction for federal income taxes as may be allowable shall be confined to cash payments made within the year covered by the income tax return; and provided further, that deductions for income taxes paid to the United States government shall be limited to taxes paid on net income which is taxable under this chapter; and provided further that income taxes imposed by the state of Wisconsin shall accrue for the purposes of this subsection only in the year in which such taxes are assessed.

(7) Contributions or gifts made within the year to the state or any political subdivision thereof for exclusively public purposes, or to any corporation, community chest fund, foundation, or association operating within this state, organized and operated exclusively for religious, charitable, scientific, or educational purposes, or for the prevention of cruelty to children or animals, no part of the net income of which inures to the benefit of any private stockholder or individual, to an amount not in excess of ten per centum of the taxpayer's net income of the calendar or fiscal year as computed without the benefit of this subsection."

* * *

B. Index to Deductions

This index is designed to assist the physician in ascertaining what deductions are allowable. The number given after each heading refers to the par-

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agraph numbering on the pages following. The paragraphs explain in detail what deductions and depreciation are allowable.

Automobiles (1)
- Depreciation.
- Insurance (1) (4)
- Maintenance.
- Professional use.
- Repairs.
- Salary of chauffeur.

Bad debts (2)
Bandages (9)
Conventions (8)
Depreciation
- Automobiles—25% annually of cost price (1)
- Instruments (9)
  - 20% annually of cost price of surgical instruments and general equipment; 25% on x-ray equipment.
- Medical Library (6)
  - 10% annually of cost price.
- Office equipment (10)
  - 10% annually of cost price.

Dividends Received (3)
Dues (12)
Equipment
- Office (10)
- Professional (9) (16-a)

Fire, losses by (7)
Instruments (9)
Insurance Premiums (4)
- Automobile (1)
- Malpractice (4)
- Professional Equipment (4)

Interest Paid (5)
Laboratory Materials (9), (16-a)
Law Suits (16-b), (16-d)
Library (6)
Licenses (13)
Losses, by fire, flood, theft, suit, etc. (7) (16-d)
Medical Convention (8)
Medical Supplies (9)
Miscellaneous (16)
Office Expenses (10)
- Heat, light, supplies, telephones, water, short-lived office equipment, annual depreciation on furnishings and fixtures.

Office Rental (11)
Post-Graduate Studies (14)
Professional Convention (8)
Professional Dues (12)
- County Society
- State Society, $12
- Special Societies as:
  - College of Surgeons
  - College of Physicians
- Any other paid in interest of profession.

Professional Subscription (6)
Salaries (15)
Sale of Spectacles (16-c)
Scientific Meetings (14)
Subscriptions (6)
Taxes and Licenses (13)
- Automobile licenses.
- Federal income and property taxes.
- Import duties, etc.
- Personal property taxes.
- Professional license fees.
- Real property taxes on office owned and used by taxpayer in practice.
- Wisconsin income taxes and surtaxes paid.

Theft, loss by (7)
Traveling Expenses (14)
- Both professional calls and scientific meetings.

Wages and Salaries (15)
- Chauffeur (1)
- Clerk (15)
- Laboratory assistant (15) (16-a)
- Maid (15)
- Nurse (15)
- Stenographer (15)
- Any other employee rendering service in connection with taxpayer's practice or in the care and treatment of patients. (15)

C. Explanations of Deductions

In seven instances below, references are made to numbered paragraphs of the federal portions of this digest. Such references make it unnecessary to recopy explanatory paragraphs applicable equally to the making of state and federal returns.

1. **Automobiles** (See Federal Digest, 1).
2. **Bad Debts** (See Federal Digest, 2).
3. **Dividends Received.** Cash dividends received from a corporation's surplus accumulated since January 1, 1911, are deductible by the persons receiving the dividends, if the following requirements are fulfilled:

(1) The corporation paying the dividend must have filed a Wisconsin income tax return for the year preceding the payment of the dividend.

(2) The income of the corporation paying the dividend must have been subject to the Wisconsin income tax law for the year preceding the payment of the dividend.

(3) The principal business of the corporation paying the dividend must have been attributable to Wisconsin for the year preceding the payment of the dividend.

If 50% or more of the entire net income or loss of a corporation, after adjustment for income tax purposes, for the year preceding the payment of a dividend, was used in computing the taxable income of such corporation, it will be considered that the principal business of such corporation was attributable to Wisconsin.

4. **Insurance Premiums.** Premiums paid for insurance against professional losses are deductible. This includes insurance against damages for alleged malpractice, against liability for injuries by a physician's automobile while in use for professional purposes, and against loss from theft of pro-

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fessional equipment, and damage to or loss of professional equipment by fire or otherwise. This further includes premiums for various forms of insurance on the building owned and used in connection with the practice, or a fair proportion thereof where the building is also a home. Under professional equipment is to be included an automobile belonging to the physician and used for strictly professional purposes.

5. **Interest Paid.** In general, all interest paid on existing indebtedness is deductible, except interest paid on indebtedness created for the purchase, maintenance, or improvement of property.

Interest paid on indebtedness created to purchase and carry securities the income from which is not subject to tax is not a proper deduction from gross income.

Interest paid on state and federal income taxes is deductible, but interest paid on fines levied for violations of law is not allowable as a deduction.

Interest paid by an individual on indebtedness created for the purpose of acquiring a home is deductible from gross income. Likewise, interest paid by an individual on money borrowed to pay personal debts, such as hospital bills and other family obligations, is considered a proper deduction from gross income.

Interest paid by an individual on money borrowed for the purpose of securing an education is allowable even though other expenses of obtaining such education are not allowable.

6. **Library.** A fair rate of depreciation on the physician's library may be deducted covering wear and tear sustained through use. In determining the rate, however, obsolescence may not be considered since the Wisconsin Income Tax Law does not recognize losses in value due to such causes. The fact that medical books become out of date during the course of ten years cannot be considered in determining the rate of library depreciation. An annual depreciation of 10% of the cost of such library seems reasonable, however.

Costs of subscriptions to scientific medical journals essential to keep the physician abreast with the progress of his profession are deductible.

7. **Losses by fire, etc.** Loss of and damage to a physician's equipment and other property used by him in connection with carrying his professional practice by fire, theft or other cause, not compensated by insurance or otherwise recoverable, may be computed as a business expense, and is deductible, provided evidence of such loss or damage can be produced. Such loss or damage is deductible, however, only to the extent that it has not been made good by repair and cost of repair claimed as a deduction.

Losses on automobiles, aircraft, summer homes, motor boats, furniture, etc., purchased and held for pleasure are deductible from gross income where sustained because of theft, fire, flood, or other casualty. Losses on property used for both pleasure and practice are deductible only to the extent that such property was used in the practice, unless such losses were sustained through fire, flood, other casualty, or theft when the entire loss is deducted.

8. **Medical Conventions.** Ordinary and necessary expenses incurred in attending medical conventions of professional scientific societies necessary to enable the physician to carry on his profession, are deductible.

Costs of attending professional conventions must be strictly limited to the necessary cost and expense directly attendant upon such conventions. The type of professional convention here contemplated is confined to such as are, as a general rule, ordinarily and generally attended by persons of the same professional standing as the taxpayer, as necessary to the maintenance and carrying on of their regular practice and profession.

9. **Medical Supplies and Instruments** (See Federal Digest, 4).

10. **Office Expenses** (See Federal Digest, 5).

11. **Office Rental** (See Federal Digest, 6)

12. **Professional Dues.** Professional dues paid to professional associations to which the physician may belong in the interest of his profession may be deducted.

13. **Taxes and Licenses.** All taxes and licenses incident to the professional scope of the physician may be deducted. The following taxes would be deductible by any physician:

(1) Real property taxes paid on office owned by him and and used by him in his practice.

(2) Personal property taxes paid on his apparatus and equipment.

(3) Wisconsin income taxes and surtaxes paid.

(4) Federal income and profits taxes paid on net income subject to tax under the Wisconsin income tax law are deductible in the year in which actually paid in cash. The portion of a federal surtax paid on dividends from Wisconsin corporations is not allowable for Wisconsin income tax purposes, however.

(5) All license fees incident to his profession.

(6) Automobile licenses on automobiles used exclusively in the practice of his profession. See paragraph (1) supra.

(7) Import or tariff duties and business, license, privilege, excise, and stamp taxes, are deductible if incurred in connection with the carrying on of the taxpayer's practice and profession.

14. **Traveling Expenses** (See Federal Digest, 9).

15. **Wages and Salaries** (See Federal Digest, 10).

16. **Miscellaneous.**

a. Laboratory Expenses (See Federal Digest, 11-c).

b. Legal. Expenses incurred in the defense of a suit for malpractice are deductible as business expense. Expenses incurred in the defense of a criminal action, however, are not deductible.

THE new "Reference Book for Physicians and Surgeons" published by S. H. Camp and Company presents in illustrative and descriptive form various designs of Prenatal and Surgical supports together with their application. It represents developments and improvements of these supports attained scientifically through the cooperation of the medical profession itself.

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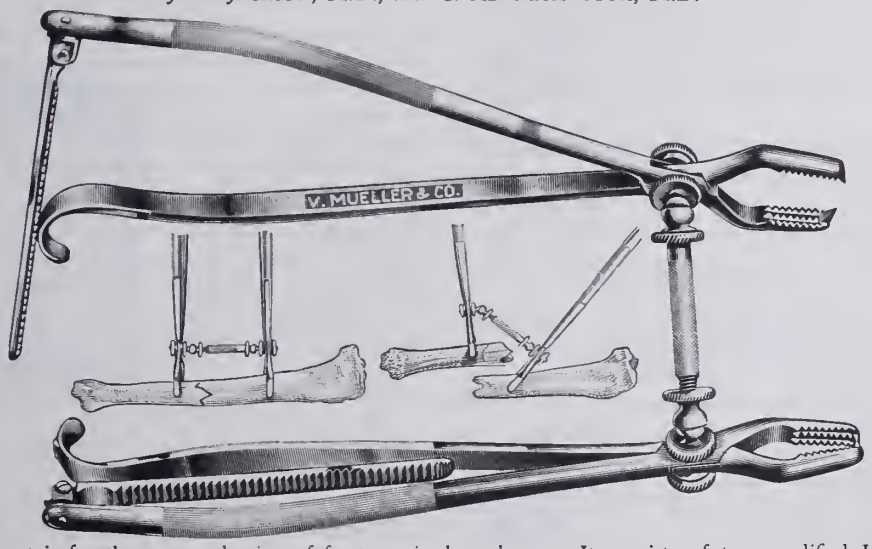

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A Text-Book of Gynecology. By James Young, M. D., gynecologist, Royal Infirmary; physician, Royal maternity and Simpson Memorial Hospital, Edinburgh. Price $3.75. The Macmillan Company, 60 Fifth Avenue, New York, New York.

This new edition has been thoroughly and completely revised and brought into accord with modern gynecologic thought and practice. The author is especially to be congratulated on the excellence of his exposition of the subject of the physiology of menstruation.

As a text-book for the student beginning his training in gynecology the book has real merit. However, it is much too brief for the advanced student and the specialist will find in it little of practical value. The illustrations are generous in number but many of them are poorly reproduced. J. W. H.

Minor Surgery. By W. Travis Gibb, M. D., consulting surgeon, City Hospital and Central and Neurological Hospitals. Paul B. Hoeber, Inc., New York. Price $5.00.

This volume consisting of over 400 pages with 148 illustrations was intended primarily for reference. It carries many helpful suggestions. Numerous conditions have been described and their treatment discussed briefly.

Its small size naturally precludes any chance of detailed discussion. J. W. G.

The Prospective Mother. By J. Morris Slemons, M. D., Los Angeles; sometime associate professor of obstetrics, Johns Hopkins University; professor of obstetrics and gynecology, University of California. Third edition. D. Appleton–Century Co., New York. Price $2.00.

Since the first edition of this book was published in 1912, it has been the model by which other books of a similar content have been patterned. The author is not only an outstanding teacher of obstetrics but he has also had an extensive experience in private practice for a number of years.

In increasing numbers women are wanting to understand the physiological processes of reproduction and asking for advice as to hygiene and proper living during pregnancy. This book is an ideal source of such information. Written in a charmingly interesting and easily understandable style it is, at the same time, thoroughly in accord with modern obstetric practice. This new third edition maintains all of the value of the two previous editions and, at the same time, it has been thoroughly revised and includes all the modern views concerning menstruation, diet in pregnancy and the like.

This is a book that the physician can unreservedly recommend to any prospective mother. J. W. H.

Symposium on Silicosis. An unofficial transcript of the Silicosis Symposium held in connection with the Trudeau School of Tuberculosis at Saranac Lake, New York, June 18–22, 1934. Edited by B. E. Kuechle, Claims Manager, Employers Mutuals, Wausau, Wisconsin.

This symposium is reported in a booklet of ninety-nine pages. In it is discussed some of the important questions concerning etiology, diagnosis, prognosis and prevention. It is to be regretted, however, that nothing is said about sericite and its importance as a cause of silicosis. But because it brings together much information of various kinds which is scattered widely throughout medical literature, it is of interest to all physicians, and particularly those who are interested in and concerned with occupational diseases, and especially those involving dust hazards.

W. D. S.

An Activity Analysis of Nursing. By Ethel Johns, R. N., editor, The Canadian Nurse and Blanche Pfefferkorn, A. M., R. N., director of studies, National League of Nursing Education. Price $2.00. The Nursing Information Bureau of the A. N. A., 50 West 50th St., New York, New York.

As the title suggests, this book is the result of a group of studies, the last ones of which were done under the auspices of the Committee on the Grading of Nursing Schools. The authors do not present the material as final truths but rather as starting points from which more studies may arise. There are three types of data presented:

1. A basic list of potential nursing conditions in hospital and community.
2. A list for classifying nursing activities.
3. A combined list of nursing activities.

The authors aim to enlist the attention of all those actively engaged in or interested in nursing education, whether they be nurses, doctors, or laymen by suggesting uses for the above date in building nursing school curricula or in selecting teaching material for individual nursing courses.

It would seem that the chief value of the book lies in its thought provoking qualities. The complexities encountered in attempting to give the nursing student a well rounded basic course are brought into the limelight, and the authors are of the opinion that there is strong argument in favor of forming the curriculum, to a greater extent, on the activity rather than on the time basis. Still another value of the book lies in the fact that the seemingly complete activities lists provided challenge the individual teacher to evaluate strictly her subject matter and teaching methods. It asks her if she is contributing her share toward the education of the student.

The book is not particularly readable, and because of the nature of the contents has a definitely limited appeal. However, the aim of the book will be accomplished if it acts as a stimulus in encouraging more research along the same lines, and if it lifts some educators in the nursing field to a new consciousness of the problems involved. H. L. B.

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A Textbook of Gynecology. By Arthur Hale Curtis, M.D., professor and head of the department of obstetrics and gynecology, Northwestern University Medical School. Cloth $6.00 net. W. B. Saunders Co., Philadelphia.

The subject matter and organization of this textbook in gynecology are excellent. The text has not been written enough in detail to recommend to students as a teaching reference. The illustrations are to be commended, and the technique of operations is clearly shown. R.E.C.

The Spastic Child. By Marguerite K. Fischel. Published by The C. V. Mosby Co., St. Louis, Mo.

This book is an essay on the intensive treatment of cerebral spastic infantile paralysis, by a mother who was unfortunate enough to have two spastic children. The first of the children died in infancy, shortly after treatment had been begun. The second child lived, and his treatment from the time the diagnosis of spastic paralysis was made was conducted by his mother under the direction of physicians and physiotherapists.

The book is intensely interesting. Her methods of treatment are scientific and practical. She has divided her treatment into periods of the child's development: the simpler measures and exercises during the early years of life, the more coordinated movements in the later years of life when the child has become more cooperative.

I believe that the chief value of the book is for parents who have spastic children, and for physiotherapists who might treat a spastic child over a period of years. To the physician it is instructive because the minute details of therapy are emphasized and in the end proven of great benefit. H.W.W.

The Dangerous Age in Men. By Chester Tilton Stone, M. D. $1.75 The Macmillan Company, 1934, New York.

This little volume of 97 pages is largely a treatise on the prostate gland. It discusses the anatomy and physiology of the prostate as well as the various diseases which affect this gland. The symptoms and treatment of these diseases are discussed in some detail. It contains many statements which the author would have difficulty in substantiating. An example of these is the following: "Disturbances of the prostate are the result of careless exercise of the sexual function and from sexual stagnation." Written for laymen, however, the advice to the individual suffering from these diseases is well founded. I.S.

The Power to Love. By Edwin W. Hirsch, M. D., associate in urology, College of Medicine, University of Illinois. Alfred A. Knopf, Inc. Price $4.00.

This is a volume of 350 pages described by the publishers as "A Psychic and Physiological Study of Regeneration" written for laymen. In the ten chapters it discusses the anatomy and physiology of the male organs of reproduction, the cause and treatment of sexual debility, frigidity and its relation to impotency, premature ejaculation and many othe subjects.

It is written frankly and such subjects as the tech nique of sexual intercourse are discussed in grea detail. After reading this book one may record hi impressions as follows:

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To a physician or to the married of either sex witl sexual maladjustment it may prove invaluable. Ii the hands of the young unmarried person of eithe sex it may suggest things which lead to undesirabl practices. I.S.

A Manual of the Practice of Medicine. By A. A Stevens, A. M., M. D., formerly professor of applie therapeutics in the University of Pennsylvania Cloth $3.50 net. W. B. Saunders Company, Phila delphia.

The thirteenth edition of this deservedly popula Manual of the Practice of Medicine appears witl numerous deletions and additions. The usefulness o it has been greatly enhanced by bringing it com pletely up to date. As the author explains in th preface, the original purposes of the book, namely its elementary character and its compact size hav not been changed. I know of no book of simila character that so well fulfills the objects the autho had in mind in writing it.—R. V. V.

Physiology in Health and Disease. By Carl J Wiggers, M. D., professor of physiology in the schoo of Medicine of Western Reserve University, Cleve land, Ohio. Price $9.00. Lea & Febiger Company Washington Square, Philadelphia.

The reader of a book review has a right to know at the outset whether the reviewer considers th book of any particular value. The reasons may follow. It may be said then, without further introduction, that Wiggers' "Physiology in Health and Disease" is a most worth while volume. It could hardly be otherwise since it comes from the pen of an eminent American physiologist who has had many years experience both as a teacher and investigator. The book is so arranged that it may serve as a text, a source book and a guide in the application of physiology to clinical medicine. It is impossible to review the actual content of such a text other than to say that it covers almost the entire field of physiology concisely, adequately and readably.

The physical make-up of the book is pleasing and there is an almost entire absence of typographical errors. Physiological problems on which there are differences of opinion are presented fully and impartially. Three things may be mentioned which make the book unique. First the references. Generous footnotes refer to current workers, many of which are as late as 1933 and 1934. At the end of chapters are lists of carefully selected review articles and monographs. Second the diagrams. Dr. Wiggers evidently has an unsual skill in condensing a

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Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

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WANTED—Young eye, ear, nose and throat physician in community situated in good dairy section of the state. Address No. 960 in care of the Journal. DJF

FOR SALE—Nelson's loose leaf medical set; Medical Woman's Journal, March 1930 to Sept. 1930 and Dec. 1931; Wisconsin Medical Journal, September 1929, September 1930 to August 1931 and January, 1933; Journal American Medical Association scattered numbers for 1927, 1928, 1930 and 1931; also other medical publications. Address inquiries to Dr. B. E. Reynolds, Lone Rock, Wisconsin. DJF

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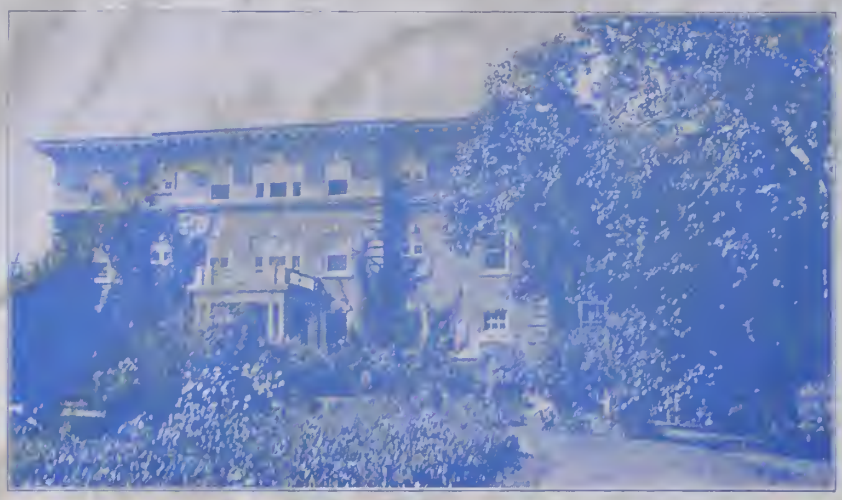

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SURGICAL COMPLICATIONS
By E. Starr Judd, M. D.
G. W. Waldron, M. D.
TREATMENT OF HAY FEVER
By J. A. Hurlbut, M. D.
STATUS OF ANTHROPLASTY
By W. R. MacAusland, M. D.
CANCER PROBLEMS
By Ellis Fischel, M. D.
THE ANEMIAS
By H. Z. Giffin, M. D.

TABLE OF CONTENTS PAGE 80

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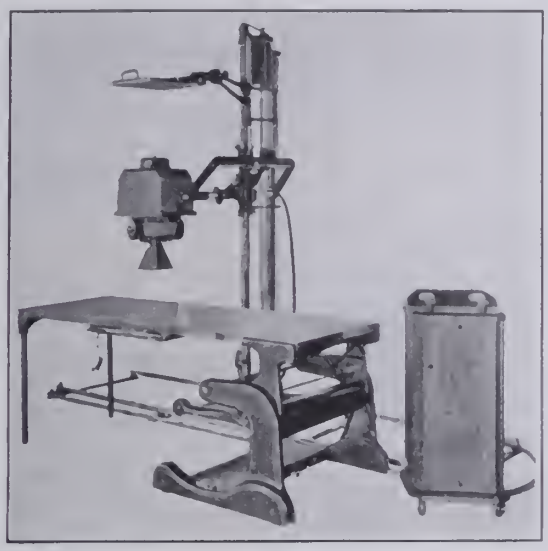

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THE WISCONSIN MEDICAL JOURNAL

Volume XXXIV
Number 2

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TABLE OF CONTENTS

ORIGINAL ARTICLES

Page

The Prevention of Surgical Complications by E. Starr Judd, M.D., and George W. Waldron, M.D., Rochester ---- 87

Treatment of Hay Fever by Ionization Method by J. A. Hurlbut, M.D., Madison ---- 93

The Present Status of Arthroplasty by W. Russell MacAusland, M.D., Boston ---- 95

Some Everyday Problems in the Diagnosis and Treatment of Cancer by Ellis Fischel, M.D., St. Louis ---- 100

A Summary of the Causes of Anemia with Fundamentals Concerning Treatment by Herbert Z. Giffin, M.D., Rochester ---- 106

EDITORIALS

Peptic Ulcer (Non-resectable) ---- 112

A Fine Tribute ---- 113

MISCELLANEOUS

Page

The President's Page ---- 114

Society Proceedings ---- 115

Woman's Auxiliary ---- 118

News Items and Personals ---- 120

Births, Engagements, Marriages, Deaths ---- 121

Correspondence ---- 122

Medical Economics ---- 124

Council Announces Medical Economics Essay Contest Open to General Membership ---- 125

Wagner Social Insurance Bill Analyzed; Large Health Subsidies to States ---- 126

Minutes of January Council Meeting ---- 127

Senator Copeland Introduces Modified Drugs and Foods Bill in Congress; Explains Changes ---- 134

Congress of Physical Therapy at Madison ---- 136

Books Received for Review ---- 138

Book Reviews ---- 138

Exchange Advertisements ---- 147

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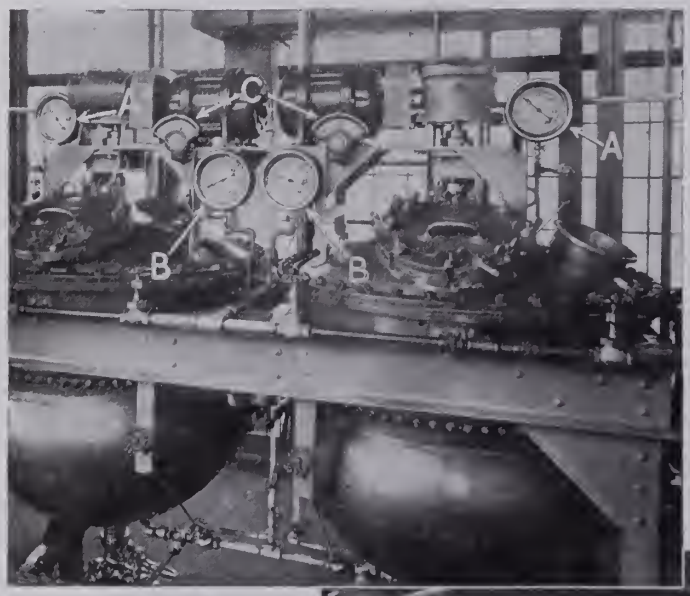
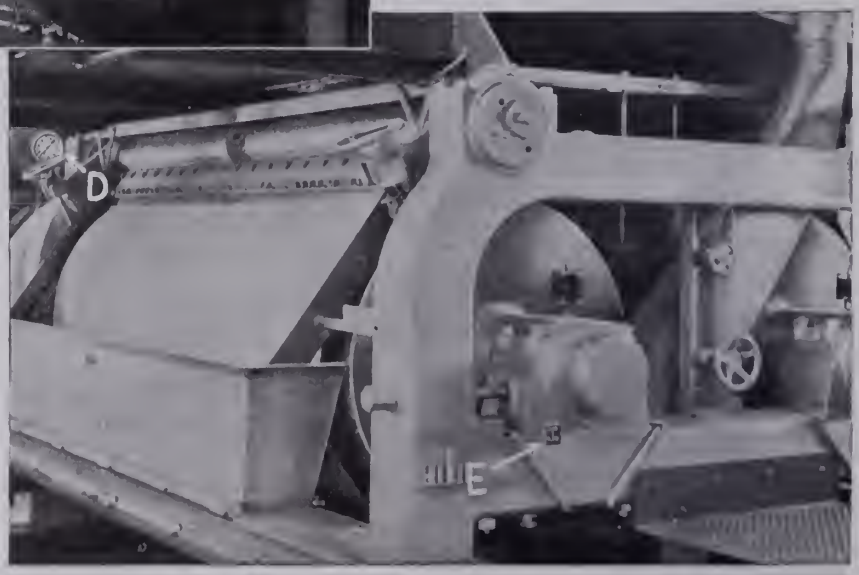


Left—Two double-jacket cookers in which Pablum is steam-cooked under rigid control. Live steam of uniform pressure and temperature flows into the cookers and displaces air above the cereal thus preventing oxidation and affording protection to vitamins and flavor. A unique paddle-knife constantly agitates the mixture so that a fresh surface is constantly presented to the steam. Note three gauges used in controlling cooking: (A) gauges maintaining uniform steam pressure in tops of cookers; (B) gauges regulating steam pressure in surrounding jackets; (C) thermometers for control of temperature (control of steam pressure and of temperature are both essential).



Right—One of many drum dryers used in the manufacture of Pablum. After the cereal mixture is steam-cooked it is dropped between revolving steam-heated rollers which roll and dry it in a uniform layer of material. Gauge (D) is used as a check on the steam pressure within the drums. Distance between them is maintained within thousandths of an inch by means of a micrometer plate (E).

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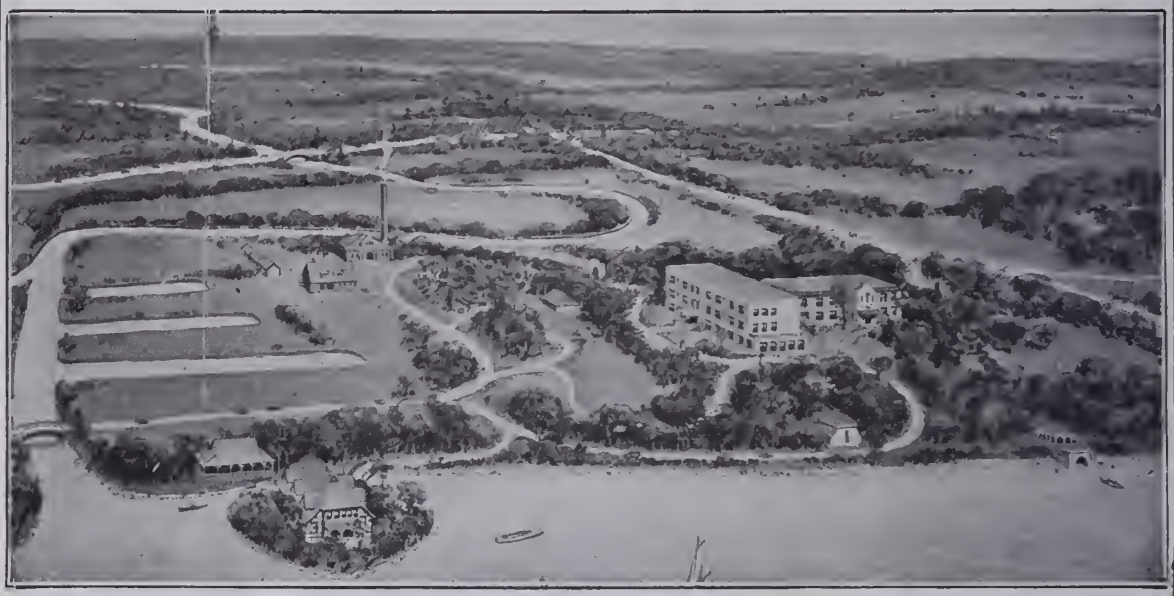

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The Prevention of Surgical Complications*

By E. STARR JUDD, M. D., and GEORGE W. WALDRON, M. D.,
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AT ONE time in the history of surgery a postoperative period devoid of complications was practically unknown. Obviously the chief complicating factor during that era, the period before asepsis, was infection. It occurred so commonly that it was scarcely recognized as a complication. Today, with the hazard of infection greatly diminished, the scope of surgical operation has expanded. It is not necessary to recount the details of progress in prevention of infection for they are well known. So much has been accomplished in this field that the rôle of chief offender has shifted, and pulmonary complications now lead all others. In the meantime, efforts of members of the medical profession to control these situations also have taken a different direction. It has been their constant aim to discover means of preventing complications and to obviate the necessity of treating them. This paper will take into consideration preventive measures only.

Lundy has divided the procedures to prevent pulmonary complications into three groups: preoperative, operative, and postoperative. Among preoperative preventive measures he gave first place to postponement of the operation in the presence of acute infection of the upper part of the respiratory tract. Preliminary medication may be used in order to reduce the quantity of anesthetic needed. Atropine may be given to reduce sweating and salivation. Preoperative postural drainage may be helpful to patients who have bronchiectasis. Administration of a nonirritating anesthetic is advantageous, especially in the presence of bronchiectasis or pulmonary tuberculosis. All foreign bodies are to be removed from the mouth, and infection in teeth and tonsils should have adequate attention. Evacuation of the stomach, bladder and rectum are essential to the comfort and welfare of the patient.

The measures designated as operative consist of: (1) maintenance of a free airway, including aspiration of the trachea when necessary; (2) keeping the operating room at about 80° F., and the humidity at approximately 55; these are more important in the presence of profound anesthesia; (3) use of heat in the presence of shock; (4) administration of an increased amount of oxygen to patients on whom preliminary medication has had unusually marked effects; this has a tendency to reduce the amount of postoperative edema; (5) prompt termination of the profound general anesthesia by means of administration of carbon dioxide and oxygen.

Among postoperative preventive measures are: (1) aspiration of the trachea when indicated; (2) postural drainage and turning the patient from side to side; (3) encouraging independent deep breathing, and (4) prophylactic administration of oxygen by nasal catheter or by tent. Inhalations of carbon dioxide three or four times daily have been rather widely employed, but there is also a good deal of variation of opinion as to their value.

Use of the oxygen tent to relieve pulmonary complications was adopted by us following the work of Boothby and others. The incidence of pulmonary complications was markedly reduced following prophylactic use of oxygen, as was shown by Judd and Passalacqua. It was of great aid if given following the first clinical signs of pneumonia and even after frank evidence of pneumonia was present. More recently, oxygen has been ad-

* Read before the State Medical Society of Wisconsin, Green Bay, Wisconsin, September 14, 1934.

ministered by nasal catheter, especially after operation on the upper part of the abdomen. Equally satisfactory results have been obtained by this method. The tent is now used mainly after complications have developed. It is also an aid in reducing fever.

King found that the season of the year and the incidence of preoperative respiratory infection played minor parts in the occurrence of pulmonary complications; the type of anesthesia used was of little or no significance; atelectasis was associated with approximately half of the pulmonary disturbances, and in those cases in which the outcome was fatal, there usually was bronchopneumonia without any signs of atelectasis. King expressed the belief that use of carbon dioxide was nearly as efficient as postural drainage and frequent turning of the patient, although the main function of the carbon dioxide seemed to be to encourage deep breathing and coughing, thereby raising the secretions.

Pulmonary complications develop about twice as frequently among men as among women, and they most often follow operations on the upper part of the abdomen. Marshall has expressed the belief that 8 per cent of patients who undergo operations on the upper part of the abdomen have pulmonary complications, whereas the general average among all patients is about 3 per cent. Carlson said that following upper abdominal operations the vital capacity is only 30 to 35 per cent of the preoperative value, whereas after procedures applied to the lower part of the abdomen, it is 50 to 60 per cent of the preoperative figure, and he attributed the difference in incidence of complications to the difference in vital capacity. He also observed that the greatest reduction in diaphragmatic excursion occurs, not directly after operation, but several hours later, when the effect of the anesthetic has disappeared, and that the highest incidence of atelectasis and pneumonia occurs after operations which cause the greatest diminution of diaphragmatic function. Marshall also concluded that inhibition of abdominal breathing is the most important factor in the pathogenesis of postoperative pulmonary complications. Lemley found that the number of pulmonary complications following spinal anesthesia was practically the same as the number following anesthesia by ether. King made a similar deduction.

Recently Gray has adopted routine postoperative postural drainage by use of the Trendelenburg position. He has the foot of the bed raised about 10 inches for the first twenty-four hours after operation. The plan was employed conscientiously with 276 patients who underwent various abdominal operations. Comparison of the results with those obtained in a much larger series of patients who were not in the Trendelenburg position led him to the conclusion that employment of this procedure had decreased pulmonary complications 30 per cent. He expressed the belief that when the patient is in this position there is less chance of his aspirating vomitus, and other material. The position allows free drainage of bronchial secretions; tends to maintain the blood pressure and reduce shock, and aids venous return from the lower extremities, decreasing the possibility of thrombosis and subsequent pulmonary infarcts or pulmonary emboli. Of course there are some conditions in which the Trendelenburg position is contraindicated. This is usually true in the presence of cardiac disease and embarrassed respiration. The arbitrary time limit of twenty-four hours was chosen chiefly because patients are inactive during this period and the cough reflex rarely becomes reëstablished within a shorter time.

THROMBOSIS

Nygaard has made an extensive study of the coagulability of the blood and of the peripheral vascular system, and he has arrived at some definite conclusions regarding the problem of thrombosis and embolism. The following views on pulmonary embolism were derived from him.

With the rare exception of a pulmonary thrombus formed in situ, there is no pulmonary embolus without previous thrombosis. The problem is, first, to prevent postoperative thrombosis of veins, and second, to prevent pulmonary emboli after the thrombus has formed. The cause or causes of postoperative thrombosis are not known.

Several factors operate to create a favorable condition for the formation of the thrombus: (1) direct or indirect injury to the wall of the vessel, (2) changes in the corpuscular elements of the blood, in the blood plasma, and retardation of the flow of blood. Little knowledge is available as to an agent that actively protects the endothelial lining of the walls of the vessels. Also, little is known regarding processes that counteract changes in the blood which lead to precipitation of platelets on the walls of the vessels, a process which must be considered to be the first part of the formation of the head of the thrombus.

Preventive measures, therefore, are directed mainly toward accelerating flow of blood in the large veins of the extremities, because more than 90 per cent of fatal postoperative emboli arise from thrombi formed in the femoral and iliac veins. In the presence of cardiac insufficiency, desiccated thyroid gland has been recommended by Walters. This is given in doses of 2 grains (0.12 gm.) three times daily as soon after operation as tolerated until the pulse rate is maintained about 100 beats per minute and is continued until the patient gets out of bed.

A significant percentage of fatal pulmonary emboli occur in peripheral veins, without any previous signs of thrombosis. This points to the fact that embolism is likely to occur during the early stages of formation of thrombi. It is, however, obvious that formation of new thrombi may take place irrespective of, or superimposed on, the older process. If clinical signs of phlebitis, edema, and tenderness of veins appear, warmth should be applied at once to the leg and the leg should be elevated. In certain cases it may be advisable to obliterate varicose veins before surgical intervention. Otherwise, bandages may be applied to the lower extremities in case of marked venous stasis in varicose veins.

It is important that the volume of blood be adequate and be maintained. An adequate intake of fluid is secured by means of intravenous administration of isotonic solutions of salt or glucose. Frequent enemas should be avoided before as well as after operation. In this respect, it is equally important to avoid the use of hypertonic solutions of glucose unless there are special indications for their use, for they tend to dehydrate the patient and to increase coagulability of the blood. To prevent unnecessary loss of bodily heat, blankets may be wrapped around the lower extremities during operation. After surgical intervention, the patient must be kept warm by blankets or hot water bottles. This is undertaken in order to combat the slowing of the peripheral circulation following surgical procedures. The inactive, relaxed position of the bed-ridden patient, with lowered metabolism and lowered blood pressure, is improved by passive movement of the limbs at intervals, and by encouraging the patient to change position and to carry on muscular exercise of the extremities. Elevation of the legs on pillows may be advisable. The pillows must be soft in order to avoid a constant pressure on the veins on the posterior aspects of the calves.

CARDIAC COMPLICATIONS

If the patient has cardiac disease, smooth anesthesia is an important part of the careful attention that should be given the patient. Preliminary medication must be chosen judiciously, as it may have great significance. As has been mentioned before, the Trendelenburg position is to be avoided both during and after operation, if it embarrasses the heart. Spinal anesthesia is used with caution on patients who have heart disease the features of which are narrowing of the coronary vessels in association with hypertension. This is true for the reason that a sharp drop in blood pressure might be incompatible with adequate circulation through the narrowed coronary vessels. Barnes has summed up the cardiac features about as follows: In considering the risk of operation on patients whose hearts are injured, patients may be divided into those whose circulation is compensated and those whose circulation is decompensated. In general, the former group may be subjected to operation with little more than the average risk. In this group will be found patients suffering from angina pectoris and an occasional patient who has calcareous aortic stenosis. The

risk involved in these cases cannot be assessed with any accuracy for sudden death may occur in either. However, sudden death seems to have little relationship to the surgical procedure, for it often occurs at a time when recovery from the operation is practically complete. If the indication for operation is clear-cut and more or less urgent, the presence of calcareous aortic stenosis or of angina pectoris uncomplicated by recent coronary occlusion should not be allowed to stand in the way of conservative types of operation. Among patients suffering from cardiac decompensation, operability depends on restoration of cardiac compensation. If, with the use of appropriate diuretics such as digitalis and the mercurial preparations, cardiac compensation can be restored, the patients usually withstand operation more or less in the usual fashion. If the cardiac lesion is attended by auricular fibrillation, digitalization before operation probably reduces the surgical risk, provided care is taken to avoid giving enough digitalis to cause signs or symptoms of intoxication to appear.

The three most common cardiac complications following surgical procedures are the occurrence of paroxysmal tachycardia, paroxysmal auricular fibrillation, and mild cardiac decompensation with edema. I never have seen any serious results attributable to the first cause, but inasmuch as the condition causes the patient much discomfort, prompt administration of quinidine sulphate, perhaps supplemented by morphine sulphate, may abort or at least shorten the attack. Paroxysmal auricular fibrillation after operation is best treated by administration of digitalis in appropriate amounts, and if edema attends the fibrillation, digitalis again is the most effective drug to be employed. In certain instances in which edema occurs, especially if cardiac rhythm is regular, mercurial diuretics may be administered with spectacular results, provided renal function is approximately normal.

GASTRO-INTESTINAL TRACT

Preoperative preparation of the patient may play a definite part in the development or avoidance of acute distention or paralysis of the gastro-intestinal tract. Orr and many others have pointed out the effect of certain measures. Experience has taught that cathartics should not be used. Adequate elimination can be secured by employment of one or more enemas at least twelve hours before surgical intervention. Water may be given by mouth until three hours before operation. If necessary, the gastric content may be aspirated just before the patient comes to the operating room. If it is deemed expedient, saline or glucose solution may be given intravenously for a day or more before operation. The chief effort is directed toward avoiding disturbance of physiologic processes. Adequate intake of fluid, together with food, rest and sleep are among the essential requirements. Orr gave as causes, or types of distention the following: (1) acute dilatation of the stomach; (2) intestinal obstruction; (3) paralytic ileus; (4) peritonitis; (5) reflex distention from trauma, and (6) postoperative distention with "gas pains." He expressed the belief that both the preventive and curative procedures must be aimed primarily at maintaining normal balance of water and sodium chloride. Salt helps to maintain normal intestinal tonus. Contrary to the general belief, he stated that morphine is a stimulant of intestinal tonus.

In the preparation of patients who are known to have gastric retention, special attention is given, which includes gastric lavage, and the use of glucose and salt intravenously. If jaundice is present, every effort is made to restore hepatic function to as near normal as is possible, and to lessen icterus. Intravenous administration of a 10 per cent solution of glucose is of definite value. It is perhaps the most widely recognized means of restoring function of an injured liver. Two per cent solution of sodium lactate sometimes is given with the glucose. Although the action of the latter is not thoroughly understood, it seems at times to cause marked improvement. All jaundiced patients should be given blood transfusion at least once before operation. Transfusions of blood, preferably whole blood, are of value in correcting altered coagulability. Daily intravenous administration of calcium chloride has been part of the preoperative preparation of these

patients during the past several years. Its worth is hard to evaluate, just as is true of sodium lactate. It is used on the theory that it helps to restore normal clotting of the blood. If possible, operation should be delayed until the jaundice has decreased as much as it seems reasonable to expect.

A rising concentration of serum bilirubin gives warning of increasing surgical risk. If the concentration of this substance continues to rise, in spite of employment of measures to reduce it, it will be best to avoid operation for the time being.

The presence of signs of gastro-intestinal obstruction is another danger signal. Intraduodenal drainage by suction-siphonage through a nasal catheter, as suggested by Paine, Carlson, and Wangensteen, will be of material assistance in adequately preparing the patient. It is of much worth, both as a preventive and as a corrective postoperative measure. If gastric or abdominal distention is anticipated, it will be well to employ the plan immediately following reaction from the anesthetic. It enhances the patient's comfort and reduces the postoperative incidence of distention, nausea, and vomiting in many cases in which stormy convalescence is not expected. It avoids the necessity of employing enemas in the early postoperative period.

Fine and Levenson have shown that in the absence of food, swallowed air is the most important source of gaseous distention of the gastro-intestinal tract. They have said that it is well to minimize the intake of liquid carbohydrate substances, especially those containing more than 5 per cent glucose; although orange juice and ginger ale contain less than 5 per cent glucose they should be avoided, for they are great producers of gas. The patient also should abstain from milk, and from foods rich in cellulose if he is to escape having gas pains.

After certain abdominal operations, such as resection of the colon, all food, even water, should be withheld for at least six days. The general tendency is to allow food too soon following abdominal operations.

PERITONEAL INFECTION

There has been considerable advancement in the development of means of preventing or controlling peritoneal infection. In this connection, Bargen has written a great deal and what follows, on this subject, is an expression of his views.

The three important aims in rehabilitating the patient before an intestinal surgical operation, and in giving him protection, are (1) to relieve obstruction and to empty the bowel; (2) to replenish lost body fluids and to bring about storage of carbohydrate; (3) to protect against peritonitis.

The first has been accomplished largely by judicious colonic irrigation and administration of mild saline laxatives. The second has been accomplished by introduction of liberal amounts of fluid, orally and perorally, and by forcing a diet high in carbohydrates and low in residue. The third aim, and a very important one, has been prosecuted in various ways. Some have introduced bacteriophage into the abdominal cavity at the time the abdomen was opened surgically; others have attempted by serums to stay peritonitis, once it has developed. At the Clinic we have tried to protect the patient, in cases in which peritonitis might occur, by intraperitoneal injection of a mixture of killed streptococci and colon bacilli. That the idea of preventing peritonitis is feasible is strongly upheld by the experimental work of Steinberg and Goldblatt, Bargen, Herrmann, Morton, Kellum, Montgomery, Rixford, and Lemon and Higgins. Herrmann, in work with dogs, demonstrated marked protection by preoperative injection of a mixture of streptococci and colon bacilli. Rixford showed that whereas the average number of cells in the peritoneal fluid of the unvaccinated human being was about 4,500 per cubic millimeter, the average count forty-eight to seventy-two hours after intraperitoneal vaccination was fourteen times greater. Furthermore, the prevailing type of cell in the peritoneal cavity, under the two conditions, was vastly different. After vaccination the majority of the cells were phagocytes; before vaccination, the usual lymphocytes prevailed.

The experimental studies mentioned have been amply substantiated clinically. On the combined intestinal service of The Mayo Clinic, for six years we have injected the bac-

terin of streptococci and colon bacilli, before operation, in approximately 1,500 cases. Injections are made through a dulled spinal puncture needle, under strictly aseptic conditions. The abdominal wall at the site of injection is cocainized. A mixture of approximately 500,000,000 to 1,000,000,000 bacteria in 10 c.c. of sterile physiologic solution of sodium chloride is given to an individual.

These procedures undoubtedly have been factors in the marked reduction in the incidence of peritonitis following intestinal operations. We compared 1925 which probably was a representative year before vaccine was used with the first four years during which vaccine was used, and found a reduction in mortality of 66 per cent; that is, whereas three patients died of peritonitis in 1925, one died in the years 1928 to 1932 inclusive.

This protection is short lived, and experience has taught us that surgical resection is most safely accomplished forty-eight to seventy-two hours after vaccination, or at the height of the cellular influx.

It is difficult to evaluate any single measure when so many others are brought into play to improve the handling of any group of cases. The grouping of intestinal cases under combined medical and surgical care on a single floor of the hospital, and careful rehabilitation before operation undoubtedly have been factors in reduction of mortality, but we believe that intraperitoneal vaccination has played the most important part in the reduction of fatal peritonitis.

The condition of the bladder should be carefully estimated before performing any abdominal operation. Should there be any obstruction or increase in the amount of residual urine, these conditions usually should have attention before anything else is attempted. The best way of avoiding urinary complications is to provide adequate drainage and treatment in every case in which there is basis for suspicion that difficulty of this nature may develop. In many instances it will be well to insert an indwelling catheter before, or immediately after, surgical intervention. Prevention of overdistention of the bladder is the best insurance against cystitis.

COMMENT AND SUMMARY

A careful estimate of the patient's general condition before operation is most advantageous. Often it leads to recognition of the possibility of the development of certain complications, and preventive measures then can be instituted.

There can be no question but that present preventive measures permit infection to be dealt with much more satisfactorily than formerly was possible. Pulmonary complications probably stand out as the most important of these disturbances. If it were not for complications arising from infection in the lungs, collapse of the lungs, and embolism and thrombosis that occur in the respiratory tract, there would have been even greater decrease in mortality and morbidity than there has been up to the present. More and more attention is being given to measures to prevent these complications, and some advance is being made.

The condition of the heart and circulatory system also should be carefully estimated before any operative procedure is undertaken, for even though there is no great circulatory decompensation, pulmonary embolus and pulmonary infarction are prone to develop. If it is recognized beforehand that the cardiovascular system has been injured, attention can be given which often will prevent serious complications.

It has not been possible to determine whether paresis is the result of infection or of a combination of circumstances. Intestinal paresis occurs in cases in which infection can be demonstrated but intestinal paresis and distention also have followed operations on the kidney, in which the peritoneum was not opened. The experience of physicians at The Mayo Clinic is that the one measure that helps these patients is to prevent intake of anything by mouth; not even water is to be given. Solutions of sodium chloride and of glucose, administered intravenously, give support. It may be necessary to continue this medication for a week or ten days. Absolutely nothing should be given by mouth as long as the paresis is present. If this plan is adhered to at the very beginning of paresis, often the paresis will clear up quickly.

Transfusion of blood before operation is of striking assistance to the patient who has jaundice. For that matter, it may also be of great assistance if repeated in the postoperative period, especially if there is the least suggestion that there is any oozing. The routine preparation of a patient with jaundice includes a transfusion of blood on the day before operation. In most instances this controls the situation very well.

Intraperitoneal vaccination against infection has been employed for some time by Bargen and Dixon in cases in which the colon is to be resected. The conclusion they have drawn from their observations is that this accomplishes a great deal toward helping the patient withstand the necessary procedure. Intraperitoneal injection of bacteriophage has appeared to be of definite advantage in some cases of acute appendicitis and acute peritoneal infection in which it has been used.

The ultimate results that have been obtained justify the conclusion that these methods of preventing complications are most advantageous and beneficial.

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Treatment of Hay Fever by Ionization Method*

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THE victims of hay fever constitute a veritable army in the United States. Physicians and members of their families are found in fair proportions among the sufferers.

Physicians should have a keen interest in the prospect of any new method of treatment. Only those who are afflicted can properly comprehend the perennial, incapacitating, physical distress and mental discouragement which confronts those with marked sensitivity.

The economic strain of the depression has added materially to the suffering of many, who, in more affluent times, were able to escape by travel from a hay fever zone.

While the problems of hay fever have been studied from many angles and definite advance has undoubtedly been made in the method of treatment, the fact remains that no one method of treatment can in a given case be specified as efficient. Specific and non-specific desensitization treatment has in truth only yielded moderately good results. A great many keen disappointments still happen. Any method of treatment which offers even a fair chance of relief to this class

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of patient who has tried all the usual methods should be welcomed and given a fair trial by the medical profession. The ionization method of treatment of hay fever is at present under trial.

It is the duty of all physicians who have had experience with it to publish their results in order that a definite rating may be given this method. Only in this way will the majority of reports establish its virtues or lack of them.

The method is not entirely new as the ionization of chronic inflammatory sinus conditions has been used especially in European clinics for many years and there are numerous recent allusions in the literature to the very satisfactory results achieved by the method in hay fever.

Thus, Philip Franklyn[1], F.R.C.S., in reporting his experience with the ionization treatment of hay fever says "The uniformly successful cures that I have obtained with the method encourages me to record the technique I have adopted during the last six years.

"Of the 22 patients with seasonal hay fever treated by this method, all had suffered annual attacks and between them had tried every known method of treatment. None of the patients has had attacks during the season following treatment. Although the patient may be free during the subsequent hay fever season, the attack may recur during the following year."

Franklyn used, as have many others, a 1 per cent solution of zinc sulphate in which the cotton nose pack strips were dipped and zinc terminals placed in each nostril. In his experience one treatment has sometimes sufficed but as a rule two treatments with an interval of some days gave the best results.

Our attention was first attracted to the ionization method in the fall of 1933 when Dr. Harold Warwick[2] of Fort Worth, Texas, gave the particular ionization method of treatment which he had developed to a group of twelve voluntary hay fever patients in the Clinic. The immediate and most satisfactory relief experienced by many of this group impelled us to offer it to certain selected patients. Of the forty-five patients treated in the fall of 1933, three patients received little if any benefit. On repeating the treatment, two reported some but not satisfactory improvement. However, the majority of patients were relieved in an entirely satisfactory manner and remained so throughout the season.

Two of the group were practising physicians who had suffered the same type of this affliction for many years and were, at the time of treatment, in a truly pitiable condition. Their immediate relief was such that it convinced us that in certain cases, at least, the ionization method was specific.

Just what happens to the intranasal tissues when ionized to bring about relief of symptoms is still problematical.

Theoretically, when metals such as zinc, copper, etc., are ionized in contact with a mucous membrane, each metal is deposited in minute quantities in the cells to a specific and definite depth. We are using Dr. Warwick's solution of zinc, cadmium and tin, and the nasal electrodes are made of the same metals. Dr. Warwick added tin to the others with the idea of utilizing its well known antipyogenic properties. Conceivably the pollen in sensitized people acts on nerve and organs in the mucous membranes and the stimuli thus generated result in a marked reflex vasodilatation of the capillaries with wiping of serum, sneezing, etc. If these trigger nerve cells are stunned and put out of commission by the ionization treatment the vicious circle is broken.

To date we have given some 134 ionization treatments for hay fever.

In conclusion, I would say that I feel that the principle of this type of treatment is correct, that the desensitization of the nerve endings of the areas of the nasal mucosa which shows a sensitivity to allergy should do more to bring about immunity to future attacks of hay fever or allied sensitivities than any other form of treatment.

In my own personal experience, the ionization treatment has given relief in a higher percentage of cases than any other method.

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The Present Status of Arthroplasty*

By W. RUSSELL MACAUSLAND, M. D.
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THE so-called modern methods of arthroplasty, in which fascia is introduced into the joint to keep the articular ends apart, have now been in use for thirty years. Murphy, in 1904, devised the fascial-fat flap method that formed the basis of these newer operative procedures. Our experience in the MacAusland Clinic with arthroplasty dates from 1909, when the writer performed an arthroplasty of the elbow joint. Two years later Dr. Andrew MacAusland performed a knee arthroplasty.

A sufficiently large series of elbow, knee, and metatarsophalangeal joints have now been treated at our clinic, and ample time has elapsed in an adequate number of them, to permit testing the real worth of the arthroplastic measure in these joints. While our experience in mobilizing the other joints that are subjects for arthroplasty—the hip, jaw, finger, and more rarely the shoulder and wrist—has been limited, making it impossible to draw accurate conclusions as to the value of the method at its present stage of development, still the indications and contraindications to mobilization have come to be definitely understood.

The results of arthroplastic treatment have grown increasingly better. Two factors account for this progress: one is the perfection of the operative technique, and the other is the surgeon's ability to select cases more carefully for operation. It is evident that each joint by reason of its anatomy and function presents a different problem. In addition, there are certain general considerations in the selection of cases that are common to all joints.

The cause of ankylosis must be considered before an arthroplasty is advised. Cases of traumatic origin lend themselves best to arthroplastic measures. Joints ankylosed as the result of a pyogenic infection may be successfully mobilized, provided the foci of infection have been completely eradicated. The causative agents in most cases of infection are the streptococcus, the gonococcus, the staphylococcus, or the pneumococcus. When the synostosis is the result of a tuberculous process, mobilization must be approached with extreme caution, owing to the danger of stirring up a latent infection.

All local signs of infection must have entirely disappeared before arthroplasty is considered. In our clinic, we place the safe period for operation in cases of infectious origin at one and one-half years after the local symptoms have subsided. If the infection is tuberculous in origin, a period of many years is allowed for the eradication of the symptoms, and even after this extended period operation is approached with the greatest caution.

The ages between twenty and forty-five years are most favorable for operation. Intervention before the age of eighteen years endangers the epiphyseal growth. Definite contraindication to arthroplasty is not presented by a more advanced age, provided other conditions are favorable. We have mobilized two knee joints in patients fifty years of age and obtained excellent results.

The condition of the skin, musculature, and bone must be considered. If the infectious process has resulted in extensive destruction of the bone and marked scarring of the skin and subcutaneous tissues, the indications for arthroplasty are unfavorable, unless the tissues can first be restored to suitable condition. Muscles controlling the joint must also be of good tone, and if atrophied, should be treated before operation.

Finally, the general health of the patient is of vital importance to the success of the arthroplasty. A thorough examination to determine any focus of infection is a most important precautionary measure. In the writer's experience, sufficient attention has not been given to this factor in the past, and while the patient has always been examined, a dormant focus of infection has sometimes been overlooked.

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Fig. 1. Case I. E. S. Roentgen film showing bony ankylosis.

THE ELBOW

The joint lending itself best to arthroplastic measures is the elbow. This is a particularly fortunate circumstance, for an ankylosed elbow unlike other joints is not functional in any position and is always an awkward member.

Arthroplasty of the elbow joint has given such satisfactory results that mobilization is always to be considered when there are no general contraindications. By the writer's technique a joint may be obtained as a routine that is stable and has a satisfactory range of function. To the average individual, it is more important that the joint have stability with a sufficient range of motion for practical purposes, than a complete arc of motion with instability. There are some operative methods in use, such as lengthening the tip of the olecranon by means of a bone graft, which provide for greater widening of the articular gap than is created by the writer's technique. Such treatment, while affording a greater range of motion, endangers the stability of the joint. In the writer's opinion it is not necessary to run any risk of obtaining an unstable joint, when there are at our disposal operative methods that ensure a satisfactory joint.

Since 1909 we have mobilized a large series of elbow joints. In the majority of cases the joints have had an excellent range of motion. They have been stable and painless, and over a period of years they have shown no tendency to develop arthritic changes, even when subjected to heavy work.

The case cited below illustrates the application of the writer's technique, and furnishes an example of the excellent results that may be expected from arthroplasty of the elbow joint.

Case I. E. S., consulted the writer on *August 11, 1913* for immobility of the right elbow and the right knee. Six years previously, this patient had suffered an acute illness that involved all joints of the body. Over a period of four years the symptoms had gradually subsided, and fairly good motion had returned to all joints except the right elbow and the right knee. (Fig. 1)

On *August 20, 1913*, the writer performed an arthroplasty of the elbow according to the regular technique.

September 10, 1913, the arm could be passively extended completely and had flexion to 15 degrees beyond a right angle.

October 11, 1913, active motion was possible.

May 15, 1919, five years and ten months after the arthroplasty, the patient reported that she had complete extension. (Fig. 2)

Fig. 2, Case I. E. S. Flexion and extension, five years, ten months after arthroplasty.

THE KNEE

In the treatment of the knee joint also, arthroplasty may be considered a standardized procedure. The knee being a complex structure and a weight-bearing joint presents a more complicated problem than mobilization of the elbow joint. Only by exacting technique is it possible to create a joint that is both functional and capable of bearing weight.

Due to the difficulty of mobilizing this joint, as well as to the fact that a knee ankylosed in 5 to 8 degrees flexion is a functional member, the indications for arthroplasty are carefully limited. Very often it is the patient's need of increased motion, for occupational or esthetic reasons, that determines the mobilization of the joint. Arthroplasty is always indicated if the knee is in a position of deformity, or if the joint allows a limited amount of motion with pain. Definite indications are also recognized in bilateral cases or when both the hip and knee on the same side are stiff.

In our experience with knee arthroplasty, the presence of a latent focus of infection has proved to be an important factor. In four of our cases there were complications from infection of the operative wound, which was traceable to a dormant focus of infection situated elsewhere in the body. In one case a gastric perforation occurred on the eighteenth day after the arthroplasty; in the second case, an abscess of the jaw developed on the tenth day after the operation; in the third case, a subacute gonorrheal infection became active in the pelvis six weeks after arthroplasty; and in the fourth case, infection developed in some old tong holes that had rust embedded in the tissue. Only the first patient of this group secured an excellent range of motion. In the second and third cases the joint re-ankylosed, and in the fourth case a little free motion only now (two years after operation) is being obtained.

In the execution of the technique, the remodeling of the articular surfaces is important, first to assure stability, and second to obviate the development of arthritic changes in later years. When the opposing joint surfaces are carefully modeled, stability is maintained in spite of the loss of the crucial ligaments.

Our experience in mobilizing the knee joint has been similar to that of other operators. The results in our early cases were far from satisfactory. During the past fifteen years there has been a marked increase in the number of our good results, due to the refinement of our operative technique and to our ability

to select cases more carefully. Our series of knee arthroplasties has not been a large one, as we have been extremely cautious in our selection of cases. Many excellent results have been obtained; the knee joints have been both functional and stable, and they have shown no arthritic changes over a period of years.

The case described below illustrates an excellent result from knee arthroplasty.

Case II. F.O'K. This patient had a completely ankylosed knee as the result of an acute gonorrheal infection.

December 14, 1910, an arthroplasty was performed.

February, 1933, twenty-three years after the arthroplasty, the patient had an excellent stable and functional knee. He told the writer that sometimes he has to think which knee was treated. (Fig. 3)

The use of mobilizing measures for hallux valgus and hallux rigidus are familiar to all surgeons, and arthroplasty is used successfully as the routine form of treatment.

Fig. 3, Case 2. F. O'K. Showing flexion of 95 degrees twenty-three years after arthroplasty.

THE HIP

Mobilization of the hip joint, as that of the knee, presents a complicated problem, since the reconstructed joint must be stable in weight-bearing. Mechanically the hip, being a ball-and-socket joint and not dependent entirely upon ligaments for support, is more adapted to arthroplasty than the knee. In spite of these advantages mobilization of the hip joint has not given such satisfactory results as arthroplasty of the knee. Surgeons today are at variance in their opinions on the advisability of mobilizing this joint. It is the writer's opinion that arthroplasty must be used with discrimination in the treatment of the hip.

In single ankylosis of the hip joint, the indications must be weighed very carefully. When the joint is stiff in abduction of 5 to 10 degrees and in flexion of 10 degrees with slight external rotation, it is a serviceable member. Walking with only a slight limp is possible, owing to the hypermobility of the lumbar spine. The patient's chief complaint is his inability to sit down and climb stairs. In these cases, it is either the patient's actual need of further mobility, or his urgent desire for more motion, that determines the attempt at mobilization.

Bilateral ankylosis of the hip, on account of the extreme disability it entails, presents definite indications for mobilization of at least one hip joint. Also, in ankylosis of the joint in a position of deformity, that is, in flexion and adduction, arthroplasty may be considered, for even if motion is not obtained in such cases, the hip is restored to functional position.

Our number of hip arthroplasties has been small. Again, we have been extremely cautious in our selection of cases for operation. As in our experience with mobilization of the knee joint, the early results were discourag-

Fig. 3, Case 2. F. O.'K. Showing weight-bearing twenty-three years after arthroplasty.

ing, but they have continued to show improvement.

OTHER JOINTS

The temporomaxillary joint when ankylosed presents such a serious situation from the standpoint of obtaining nourishment that mobilization is a matter of necessity. Fortunately, arthroplasty of this joint gives uniformly good results. Baer[1], who always used chromicized pig's bladder as the interposing material, secured such excellent results from arthroplasty that he considered the operation as permanent as that of appendectomy.

In our clinic there have not been many cases of ankylosed jaws. The two cases that we have mobilized obtained good results; one child could open her mouth one and one-quarter inches thirteen years after the arthroplasty, and the other patient following arthroplasty of both jaws could eat and talk well, and had free painless motion.

The problem of mobilizing the finger joints is a complicated one, for not only must a new joint be created, but also the tendons, which are practically always involved, must be repaired by plastic surgery. Kanavel's[2] success in restoring motion to the finger joints and in the repair of tendon defects is well known. The writer has mobilized only two finger joints. Satisfactory results were obtained in both cases.

The shoulder joint seldom calls for mobilizing measures, for the reason that when this joint is ankylosed in functional position, that is, in abduction of 45 to 50 degrees and in forward flexion of 5 to 10 degrees, the arm is a serviceable member. So closely may the compensatory movement of the scapula approach the normal function of the shoulder that the stiffness may not be detected. It is only when a young woman, for esthetic reasons, requests further mobility, or when a boy is handicapped in sports, that arthroplasty of the shoulder is considered.

The writer has mobilized only one ankylosed shoulder joint. This patient was a young woman, twenty-five years of age, whose shoulder was stiff as the result of a gonorrheal process. Following the arthroplasty, she was able to raise her hand behind her head, and the joint was perfectly stable.

The wrist is another joint that is functional when ankylosed in good position, that is, in hyperextension. For this reason, surgeons hestitate to attempt a mobilizing measure, which might result in only a few degrees of painful motion and open the joint to strain. Another explanation for the relatively few attempts at restoring motion to this joint is found in the pathological involvement of the phalangeal joints and tendons of the hand, which usually accompanies a lesion of the wrist. It would be of little benefit to restore motion to the wrist if the hand continued to be disabled.

The only indication for arthroplasty of a wrist joint is presented by the young adult who is handicapped professionally by a stiff

wrist. Thus far, the number of arthroplasties of the wrist has been so small that it is impossible to estimate the value of the procedure in this joint. However, several excellent results have been reported. The writer has mobilized two wrist joints. One young patient had a wrist ankylosed in 25 degrees flexion as the result of a septic process. The roentgenogram showed ankylosis between the scaphoid and radius and between the semilunar and the radius. The patient was unable to make a fist owing to the accompanying involvement of the fingers. Six years after the arthroplasty, the wrist had flexion of 10 degrees and hyperextension of 40 degrees. The patient could make a moderate fist. There was 10 degrees lateral motion. The second patient had a wrist ankylosed in 45 degrees flexion as the result of a subacute arthritic process. Sixteen years after the arthroplasty, the wrist had 10 degrees motion in adduction and abduction, 30 degrees flexion, and 10 degrees hyperextension. The function was perfect, and stability excellent.

CONCLUSION

In conclusion, we may say that arthroplasty of the elbow and knee joints results in a painless, stable joint with an excellent range of motion. The reconstructed knee also has proved to be a good weight-bearing joint. None of the elbow or knee joints has shown arthritic changes after a period of years.

Arthroplasty of the metatarso-phalangeal joint is recognized as the routine form of treatment and always gives satisfactory results.

The ankylosed jaw necessitates mobilization, and results are good.

In ankylosis of the hip joint, arthroplasty is used with discrimination.

The shoulder and wrist are rarely subjects for mobilization, owing to the fact that when stiff in good position, they are functional. Occasionally the fingers are mobilized. Under no circumstances is arthroplasty of the ankle justified.*

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* For a description of the technique of arthroplasty, the reader is referred to the writer's book, "The Mobilization of Ankylosed Joints by Arthroplasty", published in 1929.

Some Everyday Problems in the Diagnosis and Treatment of Cancer*

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DURING nearly twenty years' service in an institution which limits its admissions to patients suffering from cancer, I have naturally been impressed with the relative importance of certain phases of this disease as they relate to final results. In institutions which draw largely from a wide group, the clientele is much more representative of the population at large than is the clientele of private practice drawn largely from restricted communities. Therefore, it is from the wide field offered by the cancer hospital proper that I have drawn my material for discussion.

Naturally, the greatest variety in the manifestations of cancer display themselves upon the visible portions of the body. Here the life history of cancer is most readily observed and understood. Here it is that we see the lesion which is difficult to diagnose grossly or even microscopically; hence, the term "pre-cancerous" has come into general usage. Without wishing to enter into a controversy, which today occupies the minds of students of the cancer problem, whether the term pre-cancerous should ever be used, I feel that

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one can unequivocably state that certain skin lesions do undergo a change from a state of perfect benignancy to that of malignancy. For example, the so-called senile keratosis, which occurs on the exposed surfaces of the skin, the keratosis of the sailor and the farmer, which is so prone to malignant change; the melanoma, which undergoes an imperceptible metamorphosis from the perfectly benign state to one of extraordinary malignancy, must all be regarded as potentially dangerous lesions in any stage. Then we have on the skin the warty growth or the elevated mole which may have been present for twenty, thirty or even forty years without change before gradually or perhaps rapidly assuming characteristics which must classify it among the malignant tumors.

It is possible for us as practitioners of medicine, with both the physical and mental welfare of our patients at heart, to formulate a general plan of handling the patient whom we see with such early dangerous lesions. The problem is rather complex because, while we desire to protect our patient from the possible ravages of an incurable disease, at the same time, we do not wish to alarm him needlessly. It does not behoove us to take an unduly pessimistic viewpoint about the early transitional stage of lesions which may or may not be malignant. In my practice it has been almost a universally safe rule to explain to patients who have lesions which may or may not be dangerous, that in themselves these lesions are abnormal, unsightly and that their removal entails no interference with the patient's economic livelihood, very little, if any, bodily discomfort and insures safety.

We have at our disposal today three reliable methods of treating these lesions of the skin in the early stages of their change toward the dangerous side. These methods are surgery, x-ray and radium. I hold no brief for the employment of any one method of treatment, but whatever method is employed, it should be used with due regard to the fact that it must accomplish thorough destruction of the lesion with a minimum of discomfort and disfigurement to the patient.

Many patients have a "fear of the knife". Such patients can be readily treated by radiation. Other patients know of a friend or relation who has been "burned" or endured untold suffering following the use of radium; the use of radium should not be insisted upon for these patients. The same thing applies, but to less extent, to x-ray. But, irrespective of what method is employed, it should be used only with regard to rendering the patient safe from possible further trouble from a threatening lesion.

The advanced cancer of the skin, in any anatomical situation, is, fortunately, not an "everyday problem". Such lesions, due either to neglect on the part of the patient, or unfortunately, to mismanagement on the part of the physician, become real problems for the specialist in the treatment of cancer. Frequently they are problems for joint consultation between radiologist and surgeon. Each should realize the limitations of his own specialty and gladly avail himself of the help and advice of a specialist in the field in which he cannot be thoroughly acquainted.

We hope to approach the millenium when there will no longer be advanced cancer of the skin. The early cancer of the skin is so evident and its complete eradication ordinarily is so simple that the medical profession should make it its obligation to see that advanced cancer of the skin is relegated to the limbo of medical curiosities.

CANCER OF THE ORAL CAVITY

Cancer of the oral cavity, particularly of the lower lip, is one of the frequent problems with which all physicians are confronted. The lips are plainly visible and represent a transitional stage between mucous membrane and skin; however, cancer in this location is more dangerous than the skin cancer, possibly due to the fact that the vermilion portion of the lip participates somewhat in the characteristics of mucous membrane. Here again there is no excuse for the existence of an advanced cancer. Nevertheless, advanced cancer of the lip is seen nearly every day in a cancer clinic and is, therefore, still a subject which requires emphasis. The diagnosis is comparatively easy. The ulcer of the lower lip, which does not heal promptly within ten days to two weeks' time under the simplest of treatment, must be regarded as possibly

cancer. If this ulcer shows a rolled, pearly border which, to the sense of touch, is indurated, the lesion is almost certainly cancer. Up to one centimeter in diameter such a persistent ulcer can be safely excised by V excision approximately one centimeter from its border, with practically no deformity of the lip and no dysfunction. I regard this procedure as much safer than the removal of a portion of such a small ulcer for microscopic study. Subsequent therapy can be determined upon, and, as far as the lesion of the lip is concerned, the patient may be considered as cured. By subsequent therapy I mean treatment of the lymph nodes which drain the lower lip. Lesions which have become greater in diameter than one centimeter can be adequately treated with radium or x-ray, but in all these larger growths a section of the ulcer or tumor should be removed for microscopic study.

The greatest danger that I have found in recent years from cancer of the lip has been due to the fact that the significance of involvement of the lymph nodes has been overlooked. There is no great uniformity of opinion as to the relative merits of radiation and surgery in the treatment of metastases to the cervical lymph nodes from cancer of the lip. I have repeatedly stated and written that x-ray in the treatment of definitely proven metastases from squamous cell carcinoma is of no proven value. On the contrary, the adequate surgical removal of lymph nodes which are proven to contain cancer has been effective in the prolongation of life for five years or more in many instances. Since such a surgical attack upon the lymph nodes which drain the lower lip is comparatively safe and results in a minimum of deformity and disfigurement, I recommend that the subcutaneous lymph-bearing tissue which immediately drains the lower lip should be removed as a routine procedure in all cases of squamous cell carcinoma in this region; however, this is not an operation to be performed by the occasional surgeon nor even by the general surgeon who is not well versed in the distribution of the lymph channels and lymph nodes which immediately drain this area.

When one comes to the lesions entirely within the oral cavity for which the general practitioner, the dentist, the surgeon, the nose and throat specialist, in fact any practitioner of medicine, may be consulted, we are approaching a very specialized field in the treatment of cancer. Perhaps the most "everyday problem" is that of the leukoplakia. For me it has been a safe rule to pursue that the leukoplakia which cannot be felt with the finger is neither cancer nor pre-cancerous and should be left alone. Such a patient will ordinarily be either a user of tobacco or have very foul teeth and gums. He should be warned that the use of tobacco causes a chronic irritation and that cancer often follows chronic irritation. Rough teeth and infected gums are also sources of chronic irritation and should be corrected. As soon as the leukoplakia becomes palpable to the finger it at once assumes an important and possibly serious aspect. Such thickened areas, in my opinion, should be treated as cancer and should be thoroughly destroyed. The method of destruction is immaterial except that I wish to state in my experience the use of radium has neither been so endurable for the patient nor so effective in its result as the use of the scalpel, the high frequency cutting current or the actual cautery.

Suspicious lesions of the tongue must be proved not to be cancer before the patient is dismissed. Frequently such proof can be obtained only by biopsy. In many instances the removal of the entire lesion, whatever it may be, is as simple as removal of only a portion. The moderately advanced and advanced cancer of the tongue is a problem for the specialist in cancer therapy and should never be handled by anyone who is not particularly interested in the cancer problem. The methods of treatment are so individual that the choice must be left to the specialist who is to handle the case.

CANCER OF THE BREAST

I know of no lesion in the body which is so open to general discussion as the lump in the breast. Stated abstractly this should present no problem whatsoever. The breast is an organ which does not normally harbor "lumps". A "lump" in the breast is an ab-

normality which should not be allowed to remain where it does not belong. The breast is a superficial organ, readily accessible, and the removal of the lump is not accompanied by deformity or physical pain. Only by the removal of the lump for microscopic examination can a positive diagnosis be made. It is a great mistake to assume that because a lump appears in the breast of a comparatively young woman, say in the early twenties, that it cannot be cancer. It is equally absurd that a lump appearing in the breast of a woman over fifty must be cancer. Abstractly, the problem is quite simple. One can easily say that every lump in the breast should be removed for microscopic study. Practically, the problem is not quite so simple. For instance, it is frequently impossible to find a lump in the breast of a patient who states quite positively that there is a lump in the breast. After very close examination both in the sitting and supine positions, what has appeared to the patient as a lump is diagnosed by the examining physician as an unevenness in the mammary gland due to a cystic disease of the breast. Probably one of the greatest difficulties in clinical diagnosis is to differentiate between the cystic disease which is harmless and the early cancer which so closely resembles it and may possibly evolve from pre-existing cystic disease. I make it a rule never to dismiss after the first examination a patient who has a palpable thickening of the mammary gland. No matter how sure I may be that the cause of the trouble is cystic disease, the patient is instructed to report for re-examination in three weeks' time and at three months' intervals thereafter for at least a year. The subjective symptom of pain in these doubtful cases is more indicative of a harmless condition than of cancer. A word here in regard to the plainly encapsulated breast tumor is not out of place. We have found even such clinically benign tumors to be cancer. There are a few practical points about the handling of a patient whose condition demands microscopic examination of the lump in the breast for proper diagnosis and treatment. The ideal is to have all such patients in the hands of an experienced surgeon and to have a well trained tumor pathologist available for immediate microscopical examination of the lump which is to be excised. Manifestly, such an ideal is economically not always obtainable. When small lumps are to be removed and diagnosis must be delayed while the tumor is sent to a distant laboratory, it is far easier and safer to remove that segment of the breast which contains the tumor than to attempt excision of the tumor alone. I have seen cases in which biopsy was performed, for suspicious tumor, and the tumor was missed completely. The tissue submitted to the pathologist showed nothing suspicious and on the basis of the perfectly correct report from the pathologist that there was no evidence of malignancy in the specimen, the patient is reassured and lives in false security which is worse than if no attempt had been made to diagnose her tumor. There is one other point I wish to make about the surgery of breast tumors. No physician should proceed with the removal of a lump from a woman's breast unless he is prepared to perform the correct radical operation for cancer of the breast should the lump prove to be malignant.

The field of radiation in the therapy of cancer of the breast is quite limited. We have no definite proof that it is of any avail as a curative agent in the presence of lymph node metastasis. There is more evidence to support the claim that it is of value as a preoperative agent rather than a post-operative safeguard; however, when it comes to the treatment of bone metastases from cancer of the breast (and bone metastases unfortunately are not infrequent) there is no remedy which equals the use of the x-ray in its ability to relieve pain for these unfortunate sufferers.

CANCER OF THE CERVIX

Another "everyday problem" which concerns the general practitioner more than any of the rest of us is cancer of the cervix. It can be fairly stated, I think, that it is the sacred duty of every physician who delivers a woman of a child that he obligate himself to inspect the cervix of that woman within one year following delivery and be sure that there is no resultant tear of the cervix. Should such a tear be present it must be re-

paired. Such a procedure will undoubtedly eliminate a considerable percentage of cases of cancer of the cervix. The cervix is one of the hidden organs of the body and cancer will inevitably, in some instances, develop to an advanced stage without presenting symptoms; however, if women can be made to realize that the appearance of an unusual discharge or an unusual flow of blood demands consultation with a physician, and if the physician can be made to feel that such conditions obligate him to prove that they are not due to cancer, we will have gone a long step forward in our early diagnosis and adequate treatment of this common affliction.

When it comes to the treatment of cancer of the cervix we again enter a controversial field, but the use of radium with or without x-ray and with or without subsequent hysterectomy has firmly established itself as the most valuable method of handling these cases.

GASTO-INTESTINAL TRACT

The two regions of the gastro-intestinal tract which are most commonly attacked by cancer are the stomach and the rectum. The diagnosis of cancer of the stomach can only be suspected in its early stages, because there are no early signs or symptoms which are pathognomonic. We must all bear in mind that cancer of the stomach is a comparatively common disease of middle life; that more deaths from cancer are due to cancer of the stomach than any other organ or region of the body; that the only hope of cure is early diagnosis and that early diagnosis can only be made by thinking of the possibility of cancer of the stomach in all cases of change in food habits; loss of appetite; a sense of "something wrong" with the stomach; all symptoms which cannot be adequately explained by causes other than cancer. A negative x-ray does not exclude cancer. While I admit it is rather extreme I have taken the viewpoint that any case of indigestion in a patient of middle or advanced age, which is serious enough to cause him to consult a physician, which is not materially benefited by medication or regulation of diet and which cannot be proven to be due to organic or functional disease other than cancer, should be surgically explored for the possibility of cancer. Another common fallacy is to continue over a long period of time medical treatment of what appears, through x-ray and chemical examination of stomach contents, to be an ulcer of the stomach, in spite of the fact that the patient receives little, if any, benefit from the treatment. This statement does not apply to duodenal ulcers, which are rarely malignant. The only recognized curative treatment for cancer of the stomach is radical surgery, involving resection of the stomach, which is such a highly technical operation that it should never be attempted by any other than the trained surgeon who incidentally need not be a so-called "cancer specialist".

In a recent survey of cases of cancer of the rectum presenting themselves at Barnard Free Skin and Cancer Hospital, it was found that fifty per cent of such cases lacked a correct diagnosis an average of six months before their appearance at the clinic, because of the fact that the physician first consulted failed to make a digital examination of the rectum. Bleeding from the rectum is an early and fairly constant sign and cancer of the rectum should be diagnosed at a relatively early stage. The diagnosis is not difficult because here again we have the rolled, indurated margin of an ulcer and even without the visual examination through the proctoscope cancer can be diagnosed in a great majority of cases through the sense of touch. No patient who presents himself to any of us with the symptom of bleeding from the rectum should be dismissed with the diagnosis of hemorrhoids without at least a digital examination.

While there are some favorable reports as to the efficacy of radiation in the treatment of this condition only in rarest circumstances should its use be recommended. Radical operation offers such a favorable chance of cure that it today remains the procedure of choice.

SUMMARY

This resume of what I consider to be the "everyday problems" in relation to cancer which may confront all of us is prompted by the histories of a great many clinic patients, many of whose lives might have been

saved had proper attention been paid by themselves or the physician first consulted to the significance of the lesions which I have briefly outlined. To err is human and all of us are bound to make mistakes; however, a mistake in the diagnosis or treatment of cancer is a little bit different from the mistakes we make in other conditions since in cancer the initial mistake, either in diagnosis or treatment, not infrequently robs the patient of his only chance of cure and dooms him to needless suffering and death.

DISCUSSION

F. A. Thayer (Beloit). Some weeks ago I read the following sentence in an article in the American Journal of Surgery: "In the handling of these patients there has been no other consideration at stake than to care for each patient to the patient's best advantage under the conditions which existed at the time the patient presented himself for treatment." I was interrupted by the postman handing me a letter from Dr. Arnold Jackson requesting me to discuss "Some Everyday Problems In The Diagnosis And Treatment Of Cancer", by Ellis Fischel, M. D.

This prompted me to see who had written the article I was reading. It was "Surgery As Applied To Lymph Nodes Of The Neck In Cancer Of The Lip And Buccal Cavity", by Ellis Fischel. I was so impressed by this statistical study that I decided to accept Dr. Jackson's request, knowing that this would enable me to meet Dr. Fischel, who had written this most comprehensive and helpful article in the American Journal of Surgery.

I wonder if I might make a confession? I think I can speak for a large percentage of the country doctors when I say that we go to these medical meetings to play golf, meet and hear some of the great doctors, incidentally pick up a few helpful things, and many times in the past to go home with the impression that all we were good for was to pass most of our cases on to the specialist.

Having met Dr. Fischel, read and heard him give this paper, although he is evidently a real specialist, I feel that this paper fosters a simplicity of procedure not requiring special instruments, that will enable *us* to care for each patient to the patient's best advantage.

I am sure one of the difficult decisions that the family physician must make is what cases should be sent to the specialist, constantly keeping in mind "the patient's advantage". I have probably, in over 30 years, seen about 1/100 as many patients with cancer as Dr. Fischel has seen in 20 years. I know one of the greatest advantages to me as well as the patient is to be able to send a certain case of cancer to the best specialist at the best time.

I believe Dr. Fischel, with the rest of us, is obsessed by the problem of cancer. Dr. Bloodgood says cancer never begins in a healthy spot. This abnormal spot must be looked on as a new growth or a tumor, but the cells at first, though abnormal, are not yet malignant. I am glad to see that Dr. Fischel does not prohibit us from using the term "pre-cancerous" as he states "that one can unequivocably state that certain skin lesions do undergo a change from a state of perfect benignancy to that of malignancy".

Therefore the cure of this spot will prevent cancer. In some cases it may be cured by removing the cause, in other cases the spot as well as the cause must be removed.

Last Tuesday, after reading a paper on waterborne diseases before the Kiwanis Club, I was asked by a prominent attorney if my profession sanctioned the use of the influence of the mind of the patient.

I replied that I felt that every successful physician employed the influence of the mind to the limit in his efforts at cure.

Dr. Fischel has expressed this thought when he said, "It does not behoove us to take an unduly pessimistic viewpoint about the early transitional stage of lesions which may or may not be malignant. In my practice it has been almost a universally safe rule to explain to patients who have lesions which may or may not be dangerous, that in themselves these lesions are abnormal, unsightly, and that their removal entails no interference with the patient's economic livelihood; very little, if any, bodily discomfort and insures safety."

One of the everyday problems taken up by Dr. Fischel in "Diagnosis and Treatment of Cancer" is "the lump in the breast."

Of the 100,000 people who die in the United States annually of cancer, 10,000 die from "the lump in the breast".

Dr. Fischel states that abstractly this should present "no problem whatsoever".

I will admit that of all my mistakes in diagnosis of cancer more have been made on the breast than any other. Sometimes a woman states she has a lump in the breast; I cannot find it, but always ask her to return and frequently later even I can find it.

Most doctors today are satisfied that Paget's disease is secondary to cancer in milk ducts. The eczema is secondary to carcinoma and not vice versa.

The degree of malignancy is a very important factor in determining prognosis. If we consider a cancer of the breast operable I believe we should lean to the radical side and begin our operation in the axilla, thereby cutting off the blood supply and also avoiding the contamination of the wound with lymph which is apt to contain cancer cells.

A few years ago Dr. Trout received replies to a questionnaire sent to 149 surgeons. Eighty-nine per cent believed there is benefit in postoperative irradiation. I believe Dr. Fischel has more faith in preoperative irradiation. There seems to be a concensus of opinion that postoperative irradiation can do no harm and preoperative may.

A Summary of the Causes of Anemia with Fundamentals Concerning Treatment*

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THE blood is a vehicle of transportation. As a continuous liquid train it carries products from place to place in the organism: agglutinins, precipitins, antitoxins, hemolysins, and hormones; oxygen, derivatives of carbohydrates, proteins, and fats; water, vitamins, and urea; leukocytes, erythrocytes, and platelets—these and many more are its passengers and freight.

Anemia in a broader sense might be defined as a deficiency in any of these substances or in the amount of blood; however, as usually understood, the term means a deficiency in hemoglobin, or erythrocytes, or both. In the vitally important process of combustion, hemoglobin is the chief carrier of oxygen and carbon dioxide. Hemoglobin is transported by erythrocytes. The erythrocyte may be likened to a tiny sponge, of which nearly two-thirds is water and one-third is hemoglobin, and the remainder very small quantities of many other substances. I hope in what follows, I shall not cause confusion by making brief remarks on many different topics.

Hypochromic anemia; microcytosis and macrocytosis. By hypochromic anemia is meant the type of anemia in which the content of hemoglobin is reduced more than the erythrocyte count. If the production of anemia is rapid, as in sudden hemorrhage, the erythrocytes remain normal in size, or normocytic; the content of hemoglobin in each erythrocyte is reduced per unit volume of erythrocyte. If anemia develops slowly the erythrocyte becomes smaller (microcytic) and the hemoglobin per unit volume of erythrocyte may be normal. One may, therefore, have hypochromic, normocytic anemia, as in sudden hemorrhage and acute aplastic anemia; or hypochromic, microcytic anemia, as in slow loss of blood, chronic infections, and chronic idiopathic hypochromic anemia. By hyperchromic anemia is meant anemia in which the content of hemoglobin of the blood is reduced less than the number of erythrocytes; in other words, the value for hemoglobin is relatively higher and the number of erythrocytes is relatively lower than would obtain with an equal reduction of concentration of hemoglobin and of number of erythrocytes. To maintain a normal content of hemoglobin per unit volume of erythrocytes many of the erythrocytes become larger, and hyperchromic anemia always becomes macrocytic. This does not necessarily mean that with hyperchromasia the erythrocytes are supersaturated with hemoglobin per unit volume. Pernicious anemia and sprue are the outstanding diseases in which hyperchromic, macrocytic anemia occurs.

In the morphologic examination of blood smears, macrocytosis, microcytosis, and the so-called spherical microcytosis may be recognized. Of course, microcytosis is a condition and a condition cannot be spherical, but this will be clarified immediately. In normal blood, certain percentages of cells are microcytic, other percentages are normocytic, and still other percentages are macrocytic. The terms "macrocytosis" and "microcytosis," therefore, mean not that all cells, but that a definitely increased percentage of cells, are macrocytes or microcytes. The expert morphologist can recognize these abnormalities at a glance.

Spherical microcytosis is a condition in which the erythrocytes approach the spherical instead of the biconcave form and a preponderance of microcytes is present; it is almost pathognomonic of hemolytic icterus with splenomegaly.

Miscellaneous tests. Any hemoglobinometer will be satisfactory for estimation of hemoglobin if the object is comparison of the

* Read before the 93rd Anniversary Meeting, State Medical Society, Green Bay, Wisconsin, September 12–14, 1934.

condition of the blood at successive intervals during treatment. However, for accurate study, the hemoglobin should be read in grams per 100 c.c., and it should be recognized that there will be normal variations, as there will be in the results of determinations of blood urea or in any other quantitative test: the value for hemoglobin may be corrected to correspond with a normal of 5,000,000 cells per cubic millimeter of blood for purposes of estimating color index. The normal concentration of hemoglobin, however, usually will be about 16 gm. per 100 c.c.

The hematocrit is valuable in determining total volume of erythrocytes and should be employed much more frequently than it is at present. Oxalated blood is used, and the Van Allen method is widely employed. Forty-two per cent of erythrocytes is an average normal. The average volume of the erythrocyte can be determined if the erythrocyte count is known. The hematocrit gives a clear, visual conception of the condition of the blood, and is particularly valuable in demonstrating the macrocytosis of pernicious anemia, the microcytosis of hemolytic icterus, and the increased volume of blood of polycythemia.

The peroxidase method of staining has not given much help in diagnosis, and has led to some confusion. Proper training and experience in the study of blood smears give a basis for more accurate opinions with regard to differentiation of cells and diagnostic features of morphology.

The pallor of anemia. Patients may be white skinned but have normal or even polycythemic blood. They may be ruddy with anemia. Most physicians have learned to estimate anemia by the appearance of the mucous membranes, a very satisfactory method. A more accurate idea of the degree of anemia, however, may be obtained by the appearance of the palmar surface of the hands and fingers, particularly after they have been held dependent for a minute or two, provided there is no local vascular disease. The following may be characteristic elements in diagnosis: with very severe secondary anemia and pernicious anemia, a sallow yellow pallor; with hemolytic jaundice, a lemon yellow pallor; with acute loss of blood, a waxy pallor, in nephritis with edema, pastiness and pallor; and in myxedema, puffiness and pallor.

Simple anemia. Some individuals, mostly women, never seem to maintain hemoglobin at normal concentration, and not infrequently the number of erythrocytes per cubic millimeter of their blood is reduced. There is often a family history of anemia of the same nature. Production of blood, and especially of hemoglobin, is below normal. This condition cannot be classified as an entity, yet it results in much minor ill health. It is necessary to advise such patients with respect to an adequate diet, containing blood-building substances and vitamins, and concerning the regular, periodic use of large doses of iron. They should be instructed to take ferric citrate in doses of 20 or 30 grains (1.3 to 2.0 gm.) three times a day for a month, every third or fourth month, regularly. In this way they will be assisted to maintain satisfactory health.

Secondary anemia. I cannot discuss anemia that is secondary to lesions of the gastro-intestinal tract, syphilis, tuberculosis, infectious diseases, parasitic diseases, or pregnancy. I would, however, like to emphasize that chronic focal infection, particularly of the teeth, if extreme, occasionally will be found to be the sole cause of well marked anemia. The patients sometimes lose appetite and weight, and have a pseudocachexia which simulates carcinoma of the stomach, and, of course, malignancy must be carefully excluded. They are cured by elimination of focal infection, whereas formerly treatment may have been ineffectual.

Likewise, the anemia associated with lead poisoning must be given especial consideration in diagnosis in this day of widespread dissemination of leaded gasoline, batteries, and other products in which lead is used. An abnormal amount of lead in a twenty-four hour specimen of urine may be an important diagnostic finding, in the absence of other features of lead poisoning.

Anemia caused by arsenic likewise must be uppermost in one's mind, especially when

treatment for syphilis has been given previously. The anemia of arsenic may assume features suggestive of aplastic anemia or of hemorrhagic purpura, and patients may become very ill; repeated transfusions may be necessary to carry the patient through until recovery occurs.

Chronic idiopathic hypochromic anemia. This type of anemia is common, and many of the cases were formerly thought to represent early or atypical forms of pernicious anemia. In chronic, idiopathic, hypochromic anemia there are even mild glossitis, paresthesia, and achlorhydria, all features suggestive of pernicious anemia. However, anemia recurs without becoming very severe and without the morphologic features of pernicious anemia developing. Patients most commonly are women between thirty and fifty years of age. The erythrocytes are normal, or only slightly reduced in number, but a great majority of them are microcytes and hypochromic because of the marked reduction in hemoglobin.

Treatment of chronic idiopathic hypochromic anemia and of secondary anemia in which there is deficiency of hemoglobin. Aside from transfusions, which may be necessary when the anemia is extreme, treatment simplifies itself into (1) rest, fresh air, sunshine; (2) diet containing blood-building factors; (3) administration of iron in large doses.

An adequate general diet may be described as follows: eggs, meat, and milk each once a day, green vegetables twice a day, fruits twice a day, butter three times a day, and other foods in small or moderate amounts. To this diet, for purposes of blood building, should be added liver, kidney, chicken gizzard, peaches, apricots, and prunes. These are the substances which have been shown both experimentally and by experience to produce hemoglobin most rapidly.

Administration of iron is simplified to prescribing 20 or 30 grains (1.3 or 2.0 gm.) of ferric citrate or ferric ammonium citrate three times a day after meals. This delivers the maximal amount of metallic iron, which is most important. If Blaud's pills are used, it may be necessary to give as many as 30 a day. Large doses of iron are usually effective; small doses may not be effective. When achlorhydria is present, dilute hydrochloric acid need ordinarily be given only when indigestion is troublesome. In an occasional case, however, the administration of iron is more effective if combined with the administration of hydrochloric acid. Addition of copper usually is not necessary, except in treatment of children, because a sufficient amount of copper is obtained in the food. If the erythrocyte count remains stationary in spite of the use of iron, three daily injections of a potent liver extract, prepared for intramuscular use, usually prove effective (Lederle's or Lilly's). When the erythrocyte count is reduced below 3,500,000 per cubic millimeter of blood, I have thought that better results were obtained by an initial course of three daily injections of liver extract, given intramuscularly, followed by iron.

Acute posthemorrhagic anemia. Sudden loss of 1,500 c.c. of blood by a child may prove fatal; an adult may suddenly lose half (3,000 c.c.) of his blood and recover. Slow loss of blood over a period of hours is much less serious than sudden hemorrhage. Consequently, it is essential, especially in children, quickly to increase the volume of blood by intravenous injection of acacia, 6 per cent, and by transfusion, after acute hemorrhage, and to control the hemorrhage if possible. Estimation of concentration of hemoglobin and of number of erythrocytes is of little value in determining the condition of the patient; the rapidity and character of the pulse, evidence of shock, and readings of blood pressure are much more important. Reduction in systolic pressure is an index of the reduction in volume of blood; reduction in systolic pressure to 70 mm. indicates a grave prognosis.

Acute hemolytic anemia and hemolytic jaundice. Acute hemolytic anemia may occur as the sequel of severe infection and of various acute diseases, as well as in the presence of acute poisoning. It is probably the result of hyperactivity of the reticulo-endothelial system, the cells of which phagocytose erthrocytes. There is also the acute hemolytic anemia of Lederer, which is of indeter-

minate etiology and which is associated with irregular fever. This disease is rare.

The acute hemolytic crisis following transfusion may produce a very baffling blood picture. Leukocytosis and some degree of immaturity may be present. Transfusion may be repeated and the condition aggravated. Treatment consists of omitting transfusions and allowing the patient to recover spontaneously.

Hemolytic jaundice is the outstanding example of chronic hemolytic anemia. The features of this disease are well known: anemia with moderately high color index, splenomegaly, a history of hemolytic crises (bilious spells), a characteristic lemon color resulting from bilirubinemia, absence of bile in the urine except when biliary complications are present (gallstones), increased fragility of erythrocytes, and a family history of a similar disease entity. There is one feature, however, which I would like to emphasize; it is the evidence of very active regeneration of blood. The young erythrocytes are plentiful, reticulocytes may represent from 30 to 85 per cent of the erythrocytes, polychromatophilia is very marked, and a majority of the erythrocytes are not only microcytic but spherical rather than biconcave; the young cells, however, are macrocytic. The appearance of the blood smear is pathognomonic of this disease.

In severe cases of hemolytic jaundice, serologic tests for syphilis may be positive; this should not mislead one with respect to diagnosis, for the positive tests may be false positives, and results may become negative after treatment.

At least half of the patients with hemolytic icterus have gallstones, and many of those examined have been operated on for cholelithiasis previously without beneficial effects on the anemia. Unless cholecystitis is subacute or acute, splenectomy should be performed first, and cholecystectomy later.

Special diets, iron, and transfusions are likely to be of little value in hemolytic jaundice. Transfusions are frequently followed by severe reactions and hemolytic crises. Indications are clear for splenectomy, that is, for removal of part of the hyperactive reticuloendothelial system.

Anemia of infancy. The bone marrow of infants is easily stimulated to abnormal activity, and extreme care is necessary in formulating an opinion in a given case on the basis of blood counts and blood smears. Immature cells of all types may be present as a result of malnutrition and infection. Consequently, one must be extremely cautious in making a diagnosis of leukemia in infants. After infants are eighteen months of age, this tendency to reversion to the fetal type of hemopoiesis rapidly becomes less marked, and the hematologic aspects approach those of cases in which the patients are adults.

It is safe to say that almost all of the cases reported in the literature as instances of von Jaksch's disease are syndromes secondary to other diseases: syphilis, rickets, hemolytic jaundice, lymphoblastoma, gastrointestinal disorders, and various infections.

There is one anemia of infancy which still is considered to be an entity, namely, the erythroblastic anemia of Cooley, the most characteristic feature of which is a very large number of immature erythrocytes in the blood smears, and prominent trabeculations in the bones, with thinning of the cortex of the bone.

The treatment of most forms of anemia of infancy is symptomatic and dietary, although iron, copper, and transfusions of blood frequently are indicated. Splenectomy for hemolytic jaundice and splenic anemia is better done, if possible, after patients are three years of age.

Acute aplastic anemia. In this disease there occurs progressive decrease in the production of all elements of the blood, except lymphocytes. Values for hemoglobin, erythrocytes, granulocytes, and platelets become reduced. Blood smears give very little evidence of regeneration; in other words, reticulated erythrocytes are scarce and polychromatophilia is absent. Hemorrhagic features develop, and the condition may simulate hemorrhagic purpura. The chief distinction is found in the blood smears, which in hemorrhagic purpura give evidence of good regeneration, whereas in aplastic anemia regeneration is very poor.

Aplastic anemia also may be the final picture in pernicious anemia and in leukemia,

and it may occur as a result of other fulminating diseases.

Treatment of idiopathic aplastic anemia usually is of no avail. Occasionally a patient can be supported for months by transfusions. More rarely a patient may recover.

Hemorrhagic purpura. The anemia of hemorrhagic purpura may be moderate or severe, and is mostly due to loss of blood, either externally or into the tissues. Regenerative activity, as evidenced by a study of blood smears, is normal in contrast to aplastic anemia. In contrast to acute leukemia, immaturity is not present.

Cases of hemorrhagic purpura can be divided into those that are incipient and those that are of chronic recurring type. Both of these types may be seen in an acute phase. The most severe cases, and those which are most difficult to treat, are those in which there are exceedingly acute exacerbations of the chronic recurrent type; it may not be possible to bring about improvement sufficient to warrant splenectomy; yet one hopes that surgical treatment may perform a miracle. The lesson from this is that in chronic recurrent cases splenectomy should be performed without delay. Treatment of incipient acute cases, in the first attack, should consist of at least a few days of medical treatment, including transfusions, in the hope that the patients will come out of the acute phase. Many have no recurrence. If they do not respond, splenectomy should be performed without delay. Some remarkable cures have been effected, but a higher proportion of deaths occurs among patients who are operated on when in the acute phase of the disease, particularly the acute phase of the chronic recurring type, than among those who are operated on when in the chronic phase.

Leukemia. It is necessary to discuss in a paper of this nature only two types of leukemia in which anemia may lead to inaccurate conclusions; the importance of these types, from a diagnostic aspect, is not appreciated. I refer, first, to leukopenic leukemia, in which the number of leukocytes may vary from 1,800 to 6,000 per cubic millimeter of blood. Acute leukemia of this type may be confused with aplastic anemia and hemorrhagic purpura. The diagnosis rests on an extended study of blood smears for myeloblasts, and for intermediate immature forms of granulocytes, lymphocytes, or monocytes. The blood of aplastic anemia gives evidence of very defective regenerative activity of erythrocytes, leukocytes, and platelets, and of no immaturity. The blood of hemorrhagic purpura gives evidence of normal regenerative activity and of no immaturity or of very slight immaturity. All three of these diseases may have identical hemorrhagic features, but in hemorrhagic purpura the hemorrhagic features usually precede the development of anemia.

By contrast to leukopenic leukemia cases of infectious mononucleosis may have a high leukocyte count and unless the absence of leukemic immaturity is recognized, a bad prognosis may be mistakenly given.

The second type of leukemia I wish to mention is acute monocytic leukemia. Myeloblasts are present, the number of monocytes is increased, and immature monocytes are present in the smears. It should be kept in mind that leukemia may be myelogenous, lymphatic, or monocytic.

For acute leukemia there is no satisfactory treatment. For chronic leukemia, benzol, roentgen rays, radium, arsenic, and transfusions are the armamentarium. Transfusions may be necessary before treatment by roentgen rays can be safely undertaken. The number of leukocytes should not be reduced to less than 20,000. It is better to keep the patient in good general condition with leukocytes less than 50,000, than to use too much roentgen treatment. Fowler's solution between courses of roentgen rays seems to prolong the intervals of satisfactory health in some cases, but nothing definitely prolongs the expectancy of life. Treatment of leukemia is the black chapter of hematology.

Pernicious anemia. There are certain features of pernicious anemia which it might be interesting to consider. In recent years a definite familial predisposition to pernicious anemia has been recognized; this is accompanied by a familial predisposition to achlorhydria, which is so constant a feature of per-

nicious anemia. Pernicious anemia is rare among Jews; Orientals rarely, if ever, have pernicious anemia. Experimental work has indicated the presence of a substance in gastric juice, not hydrochloric acid, pepsin, or rennin, but the so-called intrinsic factor; experiment has indicated, also, the presence of a substance in meat and certain other foods, the so-called extrinsic factor. The interreaction of these two substances produces a third substance which, presumably acting on the bone marrow, favors complete maturation of the erythrocyte. This third substance is present in liver, in a slightly modified form in gastric tissue, in kidney, and in certain other tissues. It is this third substance which is administered in treatment. The cause of pathologic change in the nervous system in pernicious anemia is not yet known.

The blood smear has characteristics which are almost pathognomonic of pernicious anemia, but which may occur in sprue and other deficiency diseases. The majority of erythrocytes are macrocytes, although deformed cells are common, and microcytes are not rare. The polymorphonuclears are old, a majority of them having four or more lobes, with fine strands joining the lobes; occasionally cells with seven and eight lobes are seen. This constitutes the shift to the right of the polymorphonuclears. Macrocytosis and a shift to the right are diagnostic characteristics of pernicious anemia.

With respect to treatment, it should be remembered that many of the preparations of liver extract on the market are of variable potency. One batch may be effective; the next may not. It is essential to use a product of constant potency. If an inconstantly effective preparation is used, great advance in neurologic changes may occur before the situation is recognized. In my experience, Lilly's liver extract, Lederle's liver extract for intramuscular use, and ventriculin have constantly stood the test, although there are doubtless many other effective products of constant potency. Occasionally, a patient will respond best to ventriculin and liver extract combined.

Intramuscular administration of liver extract has proved to be very effective. After the blood has been brought to normal by daily and semiweekly injections, the blood count usually can be maintained by one or two injections a month. This method of treatment is really less expensive than daily administration of a potent extract.

In treatment it does seem worth while to continue giving liver extract or ventriculin in large dosage to patients with neurologic symptoms. It is also most important to warn the patient that even though the blood count has been normal for months, a daily maintenance dose of potent material must be continued without fail. I have several times seen neurologic symptoms develop rapidly on discontinuance of treatment.

Patients with combined sclerosis should not be allowed to lie inactive, but should walk frequently during the day for short periods of time to maintain coordination. They not infrequently become rapidly worse if kept at absolute rest in bed.

When the anemia does not respond promptly to treatment, a search should be made for infection. Dental, tonsillar, and prostatic infection should be eliminated, and in cases in which there is combined sclerosis, infection of the genito-urinary tract may be a factor that tends to inhibit the effectiveness of potent liver extract.

Miscellaneous. The anemia of splenic anemia and of Gaucher's disease reveals no definitely characteristic features. Splenic anemia is diagnosed by exclusion of other diseases with which splenomegaly is associated. Gaucher's disease is suspected if a patient of Jewish extraction has had splenomegaly for many years, and if roentgenograms of the bones give evidence of encroachment of marrow structure into the epiphysis and of narrowing of the cortex. Patients who have primary granulocytopenia usually are only slightly anemic. They complain of extreme weakness, and of sore mouth with ulceration; leukopenia and great reduction of granulocytes are found on examination of blood; severe anemia occurs only with protracted illness.

The anemia of myxedema may simulate pernicious anemia. The diagnosis of myxedema must be suspected on account of the ap-

(Continued on page 144)

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« « « EDITORIALS » » »

Peptic Ulcer (Non-resectable)

A STUDY of results following surgical treatment for non-resectable ulcer might prove of value in a consideration of operative treatment of the more frequent resectable ulcer.

Jejunostomy, successful in the hands of a few, has not met with general acceptance. Gastro-enterostomy has not been satisfactory. Exclusion "zur Ausschaltung" (Eiseleberg) has been uniformly abandoned because of the high incidence of stomal or jejunal ulcer.

Exclusion, with resection of the stomach, the "resection zur Ausschaltung", is a very definite improvement upon the simpler exclusion operation and its many modifications. It may be carried out in accordance with the plan of Haberer who resects the sphincter and antrum, or of Finsterer with resection of the fundus.

The difference in the reconstruction of the gastro-intestinal continuity may, or may not, be considered as a minor detail, but fundamental differences in the principles of treatment are emphasized in their conflicting conception of the proper manner of resecting the stomach, after the exclusion.

Haberer and his followers deem it essential that the pylorus and the antrum be removed. This conclusion is based upon the theory that the secretion of the antrum acts as an important stimulant to the acid-secreting cells located in the fundus. Edkins, years ago, promulgated such a theory, but it has not been accepted in various physiologic laboratories and in the clinical experience of many surgeons.

Finsterer and his followers, on the other hand, allow the antrum and the pylorus to remain claiming that their removal is not important but that adequate removal of the fundus (only cardia one-third remaining) is necessary.

There seems to be a constantly increasing sentiment in favor of the acid theory as to the cause of chronicity of peptic ulcer.

There are indications that hydrochloric acid is not the sole cause, but it is becoming recognized as a very important constant factor among the fifty or more different explanations for the occurrence of *chronic* peptic ulcer.

The stomach is being recognized as a double organ; the proximal, fundus concerned with the acid secretion; and the distal, antrum-pylorus, having to do with alkali secretion and the regulation of its emptying.

Peptic ulcer is now considered as a physiologic problem in which there is a lack of balance between an aggressive (acid) and a defense (alkaline) factor.

Treatment heretofore has been aimed chiefly at an increase in the defensive or

protective forces by use of diets, alkalis, demulcents, etc., etc. The newer methods attempt to diminish the aggressive element by anti-secretagogues or by surgical minimization of acid-secreting surfaces.

If satisfactory results follow the exclusion with resection operation, in which the distal stomach is not removed in *non-resectable* ulcer, the question naturally presents itself: Why remove this portion of the stomach in *resectable* ulcer?

The logical answer would seem to be that if such removal is unnecessary in advanced, complicated, so-called non-resectable ulcer, then retention of the antrum and the pylorus, with removal of the fundus (with or without local excision of the ulcer) would be worthy of a trial in the earlier, simpler, more common resectable ulcer.

All of which calls for a reconsideration of so-called "radical treatment", called radical because of the removal of the ulcer; alone, with the pylorus, or with the "ulcer-bearing area". Such measures might, in the light of experience with the non-resectable ulcers, be considered as "symptomatic" and the classification "radical" might be reserved for those methods in which an attempt is made to influence a supposed cause, or an important causative factor, such as hydrochloric acid.

Difference in racial characteristics and environmental conditions are well recognized as influences in the origin, progress of, and recovery from peptic ulcer.

In the United States (with the exception of Mt. Sinai, New York, Michael Reese, Chicago, and a few others) extensive resections have not been in favor. But increasing frequency of stomal or jejunal ulcer and a few startling instances of multiple recurrences, in which recovery has not been achieved until two or three resections remove most of the acid-secreting fundus, is responsible for a very evident growing acceptance of the clinical fact that peptic ulcer is a general disease with a local lesion; that simple excision of the ulcer does not necessarily cure the disease; and that operative and non-operative measures are not antagonistic but must be complemental. F.G.C.

A Fine Tribute

IN a previous issue, announcement has been made of the election of Dr. Mathew S. Hosmer to the Presidency of the Ashland–Bayfield–Iron County Medical Society. Dr. Hosmer enters the Presidency in his fiftieth year of continuous practice of medicine in the city of Ashland and in the fiftieth year of his continuous membership in both his county and the State Medical Society of Wisconsin.

The Ashland–Bayfield–Iron County Medical Society, in its selection, has paid a merited tribute to one who has given a long and fine service within his community both in private practice and in promoting the Tri–County Tuberculosis Sanatorium. And Dr. Hosmer, in turn, pays tribute to his local society when he accepts the active office of Presidency. We wish Dr. Hosmer all success during 1935 and congratulate him upon his splendid service.

PRENATAL LETTER SERVICE

A series of nine monthly letters to expectant mothers and a booklet, "Prenatal Care," are offered by the Bureau of Child Welfare, State Board of Health, as a service to any physician who wishes to request them for his patients. The letters and booklet are brief, conservative, and well-written. The information contained in them is reliable. They discuss the mother's health and her preparations for her baby and urge the importance of early and continued supervision by her physician, throughout her entire pregnancy. They answer for her many of the minor questions regarding her care, with which she hesitates to take up her physician's time at interview.

Physicians who are familiar with the letters and literature commend them highly, and they appear to be very much appreciated by the patients who receive them. Some two hundred and fifty physicians throughout the state, engaging in obstetrical practice, have for some time used the letters routinely for their patients, but the Bureau feels that there may be a number of physicians attending maternity cases who are not familiar with the service offered but who would wish the letters of instruction sent to the mothers under their care. The Bureau is therefore sending a sample set of the letters and the booklet, for inspection, to the physicians of the state attending obstetrical cases, with a supply of the printed forms for the convenience of the physician in referring requests for the letters, should he wish to do so.

. . . . THE PRESIDENT'S PAGE . . . .

"A Crucial Test"

THE New Year is upon us, bearing both happiness and misgivings. Whichever, we must all be alert to the possibilities of lightening changes in our economic situation. Therefore, I feel justified in repeating my appeal for a united front in each component society with full membership dues paid in advance. For "signs and symptoms" prognosticate that this year of 1935 will bring forth conditions and problems that will be a crucial test of the strength and the resistance of our State Organization.

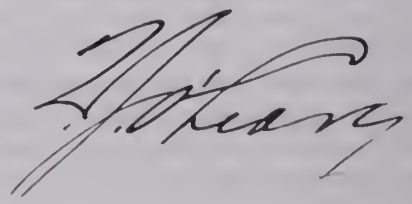
It is well known to every physician, member or otherwise, that the relentless efforts put forth by our officers are for the benefit of the practicing physician, individually and collectively. Consequently, it is *most important* that every eligible practitioner be mobilized to join in the important responsibilities which will confront us during the coming months.

Every physician in the state of Wisconsin should be keenly interested in the activities of the legislature meeting now in general session.

Rumors and propaganda put forth lead those in active touch with legislative procedure to be apprehensive, and to feel that the Society as a whole should take more active interest in legislative and administrative questions bearing upon the health and medical problems during the next few months than ever before.

The important issues pertaining to public health and medical aspects will be closely scrutinized by our secretary and legislative committee and the membership will be constantly informed through our system of weekly bulletins, or if need be, by daily bulletins. However, the secretary and the committee on public policy or other executive officers cannot assume the responsibility of familiarizing members of the legislature with the proper medical viewpoint on medical and health questions. This important duty rests upon the physicians in the individual community, and the officers of the county societies, for they are the very foundation of the parent organization in this resistance to radical changes. They can direct contacts through physicians, physicians' friends and acquaintances of members of the legislature who will be in the best position to enlighten individual legislators, and also to obtain expressions, adverse or favorable, from legislators living in their communities, so that this information may be reported to the central office.

The fruits of our service will clearly demonstrate how well we all do our share.



Society Proceedings

BARRON–WASHBURN–SAWYER–BURNETT

A meeting of this society was held at the Land o' Lakes Hotel in Rice Lake in December and elected the following officers for the ensuing year: President, Dr. H. H. Ainsworth of Birchwood; Vice-President, Dr. S. O. Lund of Cumberland; Secretary, Dr. D. L. Dawson of Rice Lake; Delegate, Dr. A. S. White, Rice Lake, and Dr. W. B. Rydell of Rice Lake as Censor.

A paper on "Mastoiditis and Sinus Thrombosis" by Dr. F. S. Cook of Eau Claire concluded the meeting.

BROWN–KEWAUNEE–DOOR

Officers elected for the year 1935 are as follows: President, Dr. R. M. Kispert, Green Bay; Vice President, Dr. L. E. Dockry, Kewaunee; Secretary-Treasurer, Dr. Walter P. Tippet and Censor for three years, Dr. P. R. Minahan of Green Bay.

CALUMET

The Calumet County Medical Society has appointed Dr. J. W. Goggins of Chilton as delegate to the annual meeting for 1935 and Dr. N. J. Knauf of Chilton as alternate. R.J.W.

COLUMBIA

The following officers were elected for 1935 at a meeting held at Poynette: Dr. H. F. Fredrick, Westfield, President; Dr. James MacGregor, Portage, Vice President; Dr. C. W. Henney, Portage, Delegate; Dr. H. M. Caldwell, Columbus, Alternate; Dr. H. Y. Fredrick, Westfield Secretary–Treasurer; Censor, Dr E. F. Tierney of Portage; Advisory Committee, Dr. James MacGregor, Dr. H. M. Caldwell, and Dr. E. F. Tierney. H.Y.F.

DANE

The guest speaker at the January meeting of the Dane County Medical Society was Dr. Herman Heise of Columbia Hospital, Milwaukee. The subject of his talk was "Drinks and the Driver." Dr. Heise pointed out the correlation of alcoholic contents of the blood and urine with respect to physiological capacity.

Guests of the evening were Mayor James R. Law and City Attorney John Harrington. Out-of-town guests were Dr. C. W. Giesen of Superior; Dr. A. G. Koehler of Oshkosh; Dr. J. R. Venning of Fort Atkinson and Dr. John E. Guy of Milwaukee. N.T.

DODGE

Members of the Dodge County Medical Society met at Hotel Rogers, Beaver Dam, on the evening of January 24th. Ballots on the membership for open panel under the proposal of the Employers Mutuals were received and a large majority announced in favor of accepting the plan. Following the dinner, the subject of relief was discussed with the local county relief director and thereafter J. G. Crownhart, Secretary, State Medical Society, spoke on the subject of "Trends in Medical Practice."

Dr. A. W. Hammond, Beaver Dam, was elected President; Dr. W. E. Bargholtz of Reeseville, Vice-President; Dr. R. R. Roberts, Beaver Dam, Secretary–Treasurer. Under the plan of the Society the President and Secretary serve automatically as Delegate and Alternate of the Society, respectively, to the State Medical Society of Wisconsin.

DOUGLAS

Officers for the new year were elected for the Douglas County Medical Society recently, the following being chosen: President, Dr. G. J. Hathaway, Superior; Secretary-Treasurer, Dr. E. A. Myers; Delegate, Dr. C. W. Giesen, Superior; Dr. C. H. Christiansen, Superior, Alternate Delegate.

Dr. C. H. Christiansen, Superior, spoke on "Arteriosclerosis."

EAU CLAIRE–DUNN–PEPIN

The annual meeting of the Eau Claire–Dunn–Pepin County Medical Society was held at the Hotel Eau Claire, December 17th. Officers for the year 1935 were elected as follows: President, Dr. Iver Stoland, Eau Claire; Vice President, Dr. F. C. Kinsman, Eau Claire; Secretary, Dr. C. H. Falstad, Eau Claire; Censors, Dr. E. E. Tupper, Dr. A. L. Payne, Dr. Nels Werner, all of Eau Claire; Delegate, Dr. F. E. Butler, Menomonie and Alternate, Dr. R. N. Leasum, Osseo. C.H.F.

LANGLADE

The annual meeting of the Langlade County Medical Society was held Wednesday noon, December 18th, at the Langlade County Memorial Hospital. An excellent steak dinner was served by members of the Hospital auxiliary.

The Society voted to reinstate the 1934 officers for the succeeding year as follows: President, Dr. J. W. Lambert, Antigo; Vice President, Dr. E. A. McKenna, Antigo; Secretary-Treasurer, Dr. J. C. Wright, Antigo; Delegate, Dr. J. C. Wright, and Alternate, Dr. L. A. Steffen of Antigo.

The Committee on Medical Relief will remain the same with Dr. M. J. Donohue of Antigo as Chairman; Dr. C. E. Zellmer and Dr. E. G. Bloor. The Inter-County Medical Relief Committee is composed of Dr. L. A. Steffen and Dr. J. W. Lambert.

MARINETTE–FLORENCE

The Marinette–Florence County Medical Society held its regular monthly dinner meeting at the Marinette Hotel, Thursday evening, December 20th.

Dr. H. L. Jorgenson of Marinette gave a case report on a "Spinal Cord Tumor."

Dr. K. G. Pinegar of Marinette had as his subject, "Ablatio Placentae" with case reports.

The following were elected to office for the coming year: President, Dr. J. V. May; Vice-President, Dr. H. W. Haasl; Secretary-Treasurer, Dr. R. W. Shaw; Censor, Dr. H. F. Schroeder; Delegate, Dr. T. J. Redelings; Alternate, Dr. H. L. Jorgenson.

In honor of his long life of service in this county as a practitioner and his many years as President of the Marinette County Medical Society, Dr. T. J. Redelings of Marinette was elected President Emeritus.

The Secretary reported on the progress made on the establishment of the open panel system in this county.

A special dinner meeting of the Society was held at Hotel Marinette on January 9th at six-thirty o'clock, to honor Dr. W. W. Bauer, Director of the Bureau of Health and Public Instruction of the American Medical Association. Dr. Bauer came to Marinette at the invitation of the Woman's Auxiliary to the Marinette–Florence County Medical Society before whom he spoke in the afternoon. The subject of his talk was "The Doctor and the Community." R.W.S.

MANITOWOC

The Manitowoc County Medical Society held a meeting on December 20th at which the following officers were elected: President, Dr. Eugene Gates, Two Rivers; Vice-President, Dr. L. J. Moriarty, Two Rivers; Secretary, Dr. R. S. Simenson, Valders and Censor, Dr. E. C. Cary of Reedsville. T.H.R.

MILWAUKEE

The January meeting of the Medical Society of Milwaukee County was held at the Milwaukee Athletic Club on January 11th. Speakers were the following:

Dr. R. H. Jaffe, director of laboratories, Cook County Hospital, Chicago, who spoke on "Kidney and Cardiovascular Diseases," and Dr. Francis D. Murphy, Milwaukee, who discussed "Nephritis."

PIERCE–ST. CROIX

At a meeting of the Pierce–St. Croix County Medical Society held in River Falls on December 20th, the following officers were elected for the ensuing year: President, Dr. C. E. McJilton of River Falls; Vice President, Dr. L. E. Jones of Prescott; Secretary-Treasurer, Dr. A. E. McMahon of Glenwood City; Delegate, Dr. A. E. McMahon; Alternate Delegate, Dr. O. H. Epley of New Richmond; Censor for three years, Dr. J. W. Livingstone of Hudson. A. E. M.

POLK

The regular meeting of the Polk County Medical Society was held at St. Croix Falls on December 20th at the home of Dr. H. C. Caldwell.

A very interesting talk was given by Lloyd Crandall, who spoke on "My Experiences as an Employe of the Russian Government." This was followed by reports of all committees. After discussion of the epidemic diseases of the county, the meeting adjourned.

Members of the Woman's Auxiliary of the Polk County Medical Society met the same evening as guests of Mrs. Caldwell.

The January meeting of the Polk County Medical Society was held on the 17th at Osceola, the guests of Dr. K. F. Johnson.

The program consisted of reports of all committees and scientific papers by Dr. H. C. Caldwell of St. Croix Falls; Dr. G. B. Noyes of Centuria, and Dr. Bjarne Pearson of Taylors Falls, Minnesota. A general discussion of epidemic diseases in Polk County was had. E.C.S.

PORTAGE

A meeting of the Portage County Medical Society was held on December 17th at which time officers were elected for 1935. They are: President, Dr. H. M. Coon, Stevens Point; Vice President, Dr. G. W. Reis, Junction City; Secretary-Treasurer, Dr. E. E. Kidder of Stevens Point; Censor for three years, Dr. E. P. Crosby; Delegate, Dr. E. E. Kidder; Alternate, Dr. F. A. Marrs, Stevens Point; Advisory Committee: Drs. H. M. Coon, W. W. Gregory, and Erich Wisiol, all of Stevens Point. E. E. K.

RACINE

The annual banquet of the Racine County Medical Society was held at 6:30 P.M., on Thursday evening, January 20th, at the Hotel Racine. Installation of officers for the ensuing year took place after the dinner. Mr. Hugh Sarles discussed the organization of a credit association for the Society. A social evening followed.

Officers for the year 1935 are as follows: President, Dr. R. D. Jamieson, Racine; Vice President, Dr. E. von Buddenbrock, Racine; Secretary–Treasurer, Dr. A. M. Lindner, Racine; Delegate, Dr. H. B. Keland, Racine; Alternate, Dr T. C. Hemmingsen, Racine; Censor, Dr. G. H. Jamieson, Racine; President-Elect, Dr. R. O. Peterson, Racine.

Following the business meeting and the election of officers, Dr. Philip H. Kreuscher, associate professor of surgery at Loyola University of Chicago, spoke on "Shoulder Injuries and Derangements" and presented lantern slides.

ROCK

The regular December meeting of the Rock County Medical Society was held on December 18th, at the Monterey Hotel in Janesville. The meeting was called to order, after the turkey dinner, by President Fred Sutherland. There were thirty members present. Dr. J. E. Gonce, Jr., Madison, presented a very complete, concise dissertation on "Care of the Premature".

Officers for 1935 were elected as follows:

President, Dr. H. E. Kasten of Beloit; Vice President, Dr. W. C. Sumner of Edgerton, and Secretary-Treasurer, Dr. C. N. Neupert of Janesville. Censor for three years, Dr. F. E. Sutherland of Beloit; Delegate, Dr. P. A. Fox of Beloit and Alternate, Dr. W. J. Allen of Beloit.

Dr. T. W. Nuzum protested against the amount of the present society dues but no action was taken.

Dr. P. A. Fox discussed fees for the care of mothers' pension cases for the county. Dr. C. M. Smith moved that the members charge the same rates as are in force for county cases. (These cases are cleared through the municipal judges.) Motion seconded by Dr. Koch and carried.

Dr. Koch protested against unfair practices on the part of insurance companies in calling in counsel. It was pointed out that the new grievance committee would arbitrate such matters when the set-up is completed.

Dr. Fox asked for more complete details on the poor relief postal cards.

Meeting adjourned.

The regular monthly meeting of the Rock County Medical Society on January 22, 1935 at the Hotel Hilton, Beloit, was called to order by President H. E. Kasten. There were fifty-eight present.

The minutes of the December meeting were read and approved.

Dr. Kasten asked for a monthly report from the Public Health and Legislation Committee beginning with this meeting.

Dr. W. T. Clark made a short report and asked that as many poor relief bills as are ready be presented to the Outdoor Poor Relief by the twentieth of each month and the balance by the end of the month so that checks may be sent out more promptly.

Dr. Kasten then introduced Dr. Waltman Walters as one of the ranking surgeons of the Mayo Clinic who was to present an illustrated paper on "Indications and Results of Conservative Surgery of the Kidney". The excellence of the paper was well demonstrated by the discussion following it. There were two physicians from Freeport and six from Rockford as guests.

Meeting adjourned. C.N.N.

SHAWANO

At a meeting of the Shawano County Medical Society held on December 19th, Dr. P. F. Schneider of Evanston, Illinois, addressed the group on "Recent Advances in Endocrinology in Obstetrics and Gynecology. It was a very interesting address. A.A.C.

SHEBOYGAN

The annual meeting of the Sheboygan County Medical Society was held in Sheboygan on December 20th. Following a seven o'clock dinner, the motion picture films on "Birth Injuries" and "Physiology of Fertilization in the Human Female" were shown through the courtesy of Mead Johnson and Company.

The following officers were elected: President, Dr. G. J. Hildebrand of Sheboygan; Vice President, Dr. R. L. Zaegel of Sheboygan; Secretary, Dr. A. C. Radloff, Plymouth; Delegate, Dr. A. C. Radloff; Alternate, Dr. A. J. Knauf, Sheboygan, and Censor, Dr. G. E. Knauf of Sheboygan. A. C. R.

WALWORTH

Dr. Thomas P. Keenan of Lake Geneva was elected President of the Walworth County Medical Society at its annual meeting held in Elkhorn. Other officers are: Dr. T. L. Jacobson, Delavan, Vice President; Dr. Walter Mauthe, Whitewater, Secretary-Treasurer; Dr. R. A. Mullen, East Troy, Censor and Dr. S. G. Meany of East Troy, Delegate.

The physicians and their wives were guests of Mr. and Mrs. Fred Hemstreet, superintendent of the county hospital, at a turkey dinner following the meeting.

WINNEBAGO

At the December meeting of the Winnebago County Medical Society the following officers were elected:

President, Dr. J. M. Conley, Oshkosh; Vice President, Dr. I. E. Ozanne, Neenah; Secretary-Treasurer, Dr. M. C. Haines, Oshkosh; Delegate, Dr. R. B. Rogers, Menasha; Alternate, Dr. M. N. Pitz, Neenah; Censor, Dr. G. E. Steele, Oshkosh.

NINTH COUNCILOR

The winter meeting of the Ninth Councilor District Medical Society was held at Wisconsin Rapids on Thursday evening, January 17th. After the dinner at six o'clock the following program was given:

"Encephalitis" by Dr. J. M. Freeman, Wausau.

"Vomiting in the New-Born"—a motion picture film illustrating the Rammstedt operation for pyloric stenosis by Dr. H. Kent Tenney, Madison.

MILWAUKEE NEURO-PSYCHIATRIC

The January meeting of the Milwaukee Neuro-Psychiatric Society was held on Thursday, the 24th, at eight o'clock at the University Club. The program consisted of the following two talks:

"Egomorphism in Psychiatry" by Gilbert J. Rich, M.D.

"Personality Traits Preceding Psychoses" by W. H. Studley, M.D.

MILWAUKEE PATHOLOGICAL

At the December 17th meeting of the Milwaukee Pathological Society, the following officers were elected for the year 1935: President, Dr. J J. Seelman, Milwaukee; Vice President, Dr. Norbert Enzer and Secretary-Treasurer, Dr. H. A. Heise.

MILWAUKEE PEDIATRIC

At the annual meeting of the Milwaukee Pediatric Society held on December 12th, the following officers were elected: President, Dr. J. Gurney Taylor; Vice-President, Dr. Edward P. Evans; Secretary-Treasurer, Dr. H. B. Miner, and for the remaining places on the executive committee, Dr. George Kelly and Dr. A. B. Schwartz.

The program for the meeting consisted of a review of 5,000 cases of scarlet fever by Dr. Max Fox of Milwaukee. Dr. S. E. Kohn presented an interesting case of chorea which had responded to typhoid vaccine therapy. Dr. M. G. Peterman concluded with moving pictures showing the convulsive seizures of various diseases. H. B. M.

MILWAUKEE SOCIETY OF CLINICAL SURGERY

At the executive meeting of the Milwaukee Society of Clinical Surgery on January 2nd, the following were elected to office for 1935: President, Dr. Louis Fuerstenau; President Elect, Dr. Dexter H. Witte; Secretary, Dr. W. J. Carson; Executive Committee: Dr. R. W. Roethke, Milwaukee and Dr. Ralph M. Carter, Green Bay.

A regular meeting of this society was held on January 19th at the University Club. The following program was presented:

"Leptomeningitis and Pachymeningitis in Neurological Surgery," by Dr. E. R. Schmidt, Madison.

"The Rise and Fall of Gastroenterostomy" by Dr. R. W. McNealy, associate professor of surgery, Northwestern University.

"Conditions Necessitating Surgery following Cholecystectomy" by Dr. H. L. Beye, professor of surgery, University of Iowa.

Discussion was opened by Dr. Chester Echols. W. J. C.

THE WOMAN'S AUXILIARY

Mrs. Rock Sleyster, 1220 Dewey Ave., Wauwatosa, *President*
Mrs. F. Gregory Connell, 420 Washington Blvd., Oshkosh, *President-elect*
Mrs. George H. Ewell, 2024 Kendall Ave., Madison, *Secretary*
Mrs. Donne F. Gosin, 631 S. Quincy Ave., Green Bay, *Treasurer*
Mrs. R. W. Tomlinson, 1021 Park Place, Wilmington, Del., *National President*

OUR 1935 PROGRAM

At the beginning of this year the State Program for the Woman's Auxiliary to the Wisconsin Medical Society as approved by the Advisory Board, was sent to your county program chairman. We are printing a copy of this program so that each may study the material offered. It is wide and varied and it is our hope that each county auxiliary will attempt a larger program than ever before.

It is our hope that each county will have at least one big open meeting this year. In order to do this it will take the co-operation of each one of us. Give your program chairman your earnest support in whatever plans they adopt. In this way, if each of us do our part, the auxiliary will keep on growing as it has in the past years.

With best and kindest wishes for the coming year, I am

Sincerely yours,
MRS. OSCAR W. FRISKE,
State Program Chairman.

STATE PROGRAM OF THE WOMAN'S AUXILIARY TO THE STATE MEDICAL SOCIETY OF WISCONSIN FOR 1935

I. At each meeting of the Auxiliary have a three minute resume of the most interesting article in "Hygeia"; The Editorial Page of the American Medical Journal and the "Auxiliary Page" of the Wisconsin Medical Journal. These to be given by the members of your auxiliary.

II. Suggestions given by the American Medical Association for open meetings only where a large attendance will be assured and will be available only in parts of the State where the absence of not more than one working day would be necessary for the speaker. These are furnished without cost by the American Medical Association.

Subjects: Popular Beliefs That are Not So; Centuries of Progress in Medicine; Health Education vs. Racketeering; The Medical Profession in Public Health; The Doctor as a Health Educator.

Speakers: Dr. William Bauer, Director Bureau of Public Instruction; Dr. R. G. Leland, Director Bureau of Medical Economics; Dr. William C. Woodward, Director Bureau of Medical Legislation.

III. Suggestions of the Wisconsin State Board of Health for open meetings.

Subject: "Disease Prevention".

1. "Prevention of Childhood Tuberculosis". When there has been an active case of tuberculosis in the

home, parents should be warned to have the children examined.

2. "Cancer". Cancer is the second leading cause of death in Wisconsin. "Early diagnosis and early treatment increase chance of cure; delay in seeking treatment is dangerous. * * * Tell people in simple language the early signs of cancer and urge those who think they may have these signs to go to their family physicians immediately. Neglected cancer is invariably and inevitably fatal". Leaflets entitled "Facts and Fallacies about Cancer" will be furnished by the State Medical Society of Wisconsin upon request from the County Auxiliaries. Reference for Speakers, Dr. W. D. Stovall, University of Wisconsin, Madison.

3. "Agencies Now Used for Immunization Against Certain Types of Communicable Diseases".

IV. The following suggestions are for your regular monthly meetings and can be given in the form of book reviews or by talks by the doctors of your own county society.

1. At least two social meetings, one in the Spring and one in the Fall. These may be in the form of a musicale, a tea, bridge parties, or, have an interesting lecture on Gardens and Flowers in the Spring. These are planned so your own members may become better acquainted with one another and will tend to create interest in your organization.

2. "Anti-Vivisection". This subject is important but should be studied only at **YOUR CLOSED MEETINGS**. For those counties in the vicinity of Madison, Dr. Walter J. Meek of the University of Wisconsin gives an excellent talk, or those counties in the vicinity of Milwaukee would find Dr. P. F. Swindle of Marquette University available. (It is customary to furnish traveling expenses for these speakers).

3. "Mental Hygiene" (This subject may be used for open meetings).

A. "Mental Hygiene for the Small Child".

B. "Mental Hygiene for the Adolescent Boy or Girl".

C. "Mental Hygiene for the Adult". (Reference for speakers for open meetings, Dr. Andrew Rosenberger, Wells Building, Milwaukee, Wis.)

4. Speakers from your own County Organizations.

A. "The Visiting Nurse."
B. "County Red Cross".
C. "Juvenile Court".
D. "Domestic Relations Court".
E. "Out-Door Relief".

5. Suggested Book Reviews.

A. 100,000,000 Guinea Pigs, Arthur Kallet and F. J. Schlink.

B. Devils, Drugs and Doctors, Howard Haggard, M. D.

C. The Human Body, Dr. Logan Clendenning.

D. Twenty Years of Mental Hygiene, American Foundation of Mental Hygiene, N. Y.

MEETING OF EXECUTIVE BOARD

The mid-year meeting of the Executive Board of the Woman's Auxiliary to the State Medical Society of Wisconsin was held on Friday. February first, at the University Club, Milwaukee. A report of the Board meeting will appear in the March issue of the Journal.

ADVISORY COUNCIL

The State Medical Society has appointed the following members to serve on the Advisory Committee to the Woman's Auxiliary: Dr. Frank W. Pope, Racine, 1938; Dr. A. W. Rogers, Oconomowoc, 1937; Dr. Rock Sleyster, Wauwatosa, 1936; President and Secretary, ex officio.

COUNTY NEWS ITEMS

Brown–Kewaunee–Door County

Mrs. John R. Minahan, Green Bay, took office as president of the Auxiliary to the Brown–Kewaunee–Door County Medical Society at the annual meeting on January ninth, following a luncheon at the Beaumont hotel. Corsage bouquets marked the places of the retiring and incoming presidents. Mrs. Minahan succeeds Mrs. Donne F. Gosin, who is Treasurer of the State Auxiliary. Mrs. F. L. Crikelair, recording secretary, summed up all activities of 1934 in an interesting resume.

Dane County

Several letters of appreciation have been received from rural schools, recipients of gift subscriptions to HYGEIA. Professor M. F. Guyer of the zoology department of the University of Wisconsin addressed the group. In the absence of Mrs. Arthur Sullivan, president, the president-elect, Mrs. Homer Carter, presided at the meeting. Mrs. Carter formerly held the office of Secretary of the State Auxiliary.

Marinette–Florence County

The "Mile of Pennies Campaign" was very successful and enabled the Marinette–Florence County Auxiliary to place HYGEIA in high schools of the county.

The Marinette Woman's Club opened its season of activities with a program given under the auspices of the Woman's Auxiliary to the Marinette–Florence County Medical Society. Dr. W. W. Bauer of the American Medical Association delivered an address on the subject of "Popular Beliefs That Are Not So", which proved a topic of unusual interest to the local club women.

Milwaukee County

A Canton Tea and reception was given Friday, January 11th, in the Crystal Ballroom of the Schroeder Hotel by the Woman's Auxiliary to the Medical Society of Milwaukee County for its new officers and directors. The hostesses and ushers wore Chinese costumes. The stage was attractively decorated with cherry blossoms. Mrs. Harry Heeb extended greetings and expressed her pleasure at the large attendance. Business was postponed until the February luncheon and the meeting was turned over to Mrs. Eben J. Carey, Chairman of the Program Committee, who introduced Miss Ella M. Hannawalt, professor of Psychology at Milwaukee Downer College, and formerly professor at Ginling College, Nanking, China. Miss Hannawalt, wearing a native Chinese costume, addressed the Society on "Social and Health Life in China".

Miss Ruth Hanser, pianist, also in Chinese costume, played "Lotus Land" by Cyril Scott, "Chinese

Quarrel" by Walter Nieman, "Mirror Lake" by Walter Nieman, "Clare de Lune" by Debussy, "Prelude in A Minor" by Debussy.

Mrs. W. G. Hyde, soprano, accompanied by Mrs. J. M. Mulvey, sang a group of Chinese Mother Goose Rhymes, "Lady Bug", "What the Old Cow Said", "The Mouse", "The Old Women", "Of What Use is a Girl", "Pat a Cake", "Baby is Sleeping", and "Home" by MacFadyan, "The Cunning Little Thing" by Hageman, "Were I a Sunbeam" by Vidal. Mrs. Hyde and Mrs. Mulvey were attractive in Chinese costumes.

Chinese dances were offered by the Ethel Koch dancers. Deep red roses and ivory tapers formed the centerpiece for the middle of the three tea tables. Mrs. Rock Sleyster and Mrs. Henry Gramling were pouring at that table. At the other two tables which had as their centerpieces silver bowls with snap dragons and daffodils, were Mrs. Roland Cron, Mrs. Carl W. Eberbach, Mrs. W. H. Washburn, and Mrs. H. G. Oakland.

Portage County

On Saturday, December 15th, the Portage County Medical Society and the Woman's Auxiliary sponsored an orthopedic clinic at the high school,—135 patients from Portage, Wood and Marathon Counties attended. Members of the Auxiliary and the nurses worked all day taking care of the children. taking histories, and serving lunches to them.

Polk County

Dr. and Mrs. H. C. Caldwell of St. Croix Falls were host and hostess to the Polk County Medical Society and Auxiliary at dinner on Thursday evening, December 20th, at the village auditorium. Following dinner the ladies held the regular business meeting at the home of Mrs. Caldwell.

Mrs. R. G. Arveson, Frederic, former treasurer of the State Auxiliary, took office as president of Polk County Auxiliary.

The guest speaker was Mrs. Lloyd Crandall of Center City who gave an interesting talk on the life of the Russian people and also showed many interesting articles of dress, jewelry, trinkets, and other handwork.

The pleasant evening closed with light refreshments served by the hostess and Christmas carols sung by all.

Racine County

Mrs. Frank W. Pope assumed the office of President of the Woman's Auxiliary to the Racine County Medical Society at the annual meeting at Hotel Racine. Mrs. Louis E. Fazen, the retiring president, was presented with flowers and complimented on her fine accomplishments.

Sheboygan County

The Woman's Auxiliary to the Sheboygan County Medical Society held its first luncheon meeting of the new year at Pfeilers with Mrs. Raymond Meyer, Plymouth, the new president, presiding. Committees were appointed and the work for the year was outlined.

News Items and Personals

A special program of lectures and demonstrations in medicine will be held under the direction of The Mayo Foundation from March 4 to 8, inclusive. Mornings will be devoted to surgical and medical clinics. In the afternoons and evenings symposiums will be conducted on urology, acute abdominal conditions, pediatrics, gastroenterology, the thyroid and parathyroid glands, and dermatology. In addition two clinico-pathologic conferences will be held. On Friday evening, March 8th, the Minnesota Trudeau Society will hold an open meeting.

While these programs are arranged primarily for the Fellows of the Foundation, visiting physicians are invited to attend.

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Dr. and Mrs. R. C. Arveson of Frederic left on an extended visit to Florida the middle of January.

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Dr. Thomas Dobbins, who came to Kenosha in 1923 as head of the medical department of Nash Motors Company, has resigned to take a similar position with Servel, Inc., Evansville, Indiana. He will have direction of the medical and surgical care of over five thousand employees and will establish a new plant hospital to be opened shortly. Dr. Dobbins recently graduated from the medical field officers school, Carlisle Barracks, Pa., with the rank of Colonel.

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Dr. W. E. Ground, Superior, a member of the Cancer Committee of the State Medical Society, spoke on "Cancer" before a public meeting of citizens sponsored by the Superior Woman's Club.

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Dr. C. F. Harris has become associated with Dr. J. V. Herzog at Elkhorn, Wisconsin. Dr. Harris will limit his practice to eye, ear, nose and throat.

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Dr. J. J. McCarthy, formerly of Sun Prairie, who has been ill for the past year, is reported to be much improved and expects to resume practice in the early summer.

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The Medical Society of Milwaukee County held its first postgraduate course for the year 1935 on January 21st at the Milwaukee Athletic Club.

Dr. Joseph L. Miller, clinical professor of medicine at the School of Medicine of the Division of the Biological Sciences, University of Chicago, gave the opening lecture of the course on Diseases of the Lungs and Pleura. Following this, those enrolled were divided into small units and assigned to local instructors.

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Dr. R. W. Blumenthal, Milwaukee, was elected Surgeon General at the annual meeting of the Mexican Border Veterans' Association held in Hartford, Connecticut, recently.

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Dr. C. T. Michna, formerly of Manitowoc, has opened an office at Denmark, Wisconsin.

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Dr. J. B. Vedder was named chief-of-staff of St. Joseph's Hospital, Marshfield, to succeed the late Dr. H. H. Milbee. Others elected are Dr. L. A. Copps, vice chief-of-staff and Dr. W. G. Sexton, secretary. The executive committee consists of Dr. William Hipke, Dr. R. P. Potter, Dr. W. G. Sexton, Sister M. Rosalinda, superior, and Sister M. Agatha.

Dr. Vedder had been a member of the staff of the Marshfield Clinic since 1920.

At another meeting held recently, Dr. R. P. Potter, Marshfield, was chosen to head the Clinic, to take the place of the late Dr. H. H. Milbee.

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Dr. Joseph Dean, Madison, councilor of the third district, who has been ill with pneumonia since January 11th is convalescing at his home.

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Dr. W. A. Rauch of Milwaukee left on an extended Mediterranean cruise. After the cruise he will take postgraduate medical work in various European medical centers for a year.

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Dr. John O. Dieterle, Milwaukee, read a paper on "Wire Fixation of Joint Fractures" at the third annual meeting of the American Academy of Orthopedic Surgeons in New York City on January 14th to 17th, 1935.

BIRTHS

A daughter to Dr. and Mrs. E. B. O'Leary, Milwaukee, on December 12th.

A son, Daniel Henry, born to Dr. and Mrs. Henry A. Romberg, Oshkosh, November 7, 1934.

ENGAGEMENTS

The engagement of Miss Louise Quick, daughter of Dr. and Mrs. Edward Quick, Milwaukee, and Mr. Ralph Boches of Boston was announced on Christmas day.

RADIO PROGRAM

Talks on health are broadcast over state stations WHA (Madison) and WLBL (Stevens Point) by the State Medical Society of Wisconsin each Tuesday, Wednesday and Thursday at 10:45 A.M. Schedule for the next month follows:

Tues. Feb.	12, 1935.	Pneumonia.
Wed. Feb.	13, 1935.	Growing Pains.
Thur. Feb.	14, 1935.	The Heart of a Child.
Tues. Feb.	19, 1935.	How to Care for the Heart.
Wed. Feb.	20, 1935.	Bending the Twig.
Thur. Feb.	21, 1935.	Washington's Death.
Tues. Feb.	26, 1935.	First Aid for the Child.
Wed. Feb.	27, 1935.	The Teething Age.
Thur. Feb.	28, 1935.	Trouble-Making Habits.
Tues. March	5, 1935.	Health Habits of the Runabout.
Wed. March	6, 1935.	A Health Economy.
Thur. March	7, 1935.	Meeting Measles.

The engagement of Dr. Robert E. Baldwin of Marshfield to Dr. Elizabeth Alice Reddeman, Madison, was announced on January 15th. Dr. Baldwin is on the staff of the Marshfield Clinic and Dr. Reddeman is an intern at Wisconsin General Hospital, Madison.

MARRIAGES

Dr. W. J. Murphy, Milwaukee, to Miss Vivian M. Dunn on December 27th.

Dr. George A. Grinde of Cumberland to Mrs. Helen Cole in December.

Dr. T. J. Hardgrove. son of Dr. and Mrs. J. H. Hardgrove of Eden, Wisconsin, to Miss Evelyn O'Leary, daughter of Mr. and Mrs. M. D. O'Leary of Milwaukee at St. Rose's Church, Milwaukee, on December 29th.

DEATHS

Dr. J. R. Longley, Fond du Lac, died at his New Orleans home on January 2nd.

Dr. Longley was born on July 17, 1879, at North Platte, Nebraska, the son of the late Dr. F. H. Longley. He attended the University of Nebraska and received his medical education in Rush Medical College from which he graduated in 1906. After serving an internship at St. Elizabeth's Hospital, Chicago, he came to Fond du Lac to become associated with Dr. F. S. Wiley. After five years of association he entered practice alone.

Dr. Longley served as a medical officer during the World War and was given a citation by Gen. John J. Pershing. He was chief surgeon of Field Hospital 377 of the North Russia Expeditionary force with rank of lieutenant-colonel, which he held after the war as a reserve officer, taking an active part in affairs of the Wisconsin Reserve Of-

ficers' association, serving as instructor of reserves at times.

He was a member of the Fond du Lac County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow, one daughter and one son.

Dr. R. L. Prees, North Fond du Lac, died at the Veterans' Hospital, Milwaukee, on December 26th.

Dr. Prees was born on June 17, 1891, in Cambria, Wisconsin. He received his early education at Swansea, Wales, where from 1897 to 1907 his father held the position of United States Consul under the McKinley administration. He returned to Cambria with his parents in 1907. He was a graduate of the University of Wisconsin in 1915. In 1917 he received his medical degree from the University of Pennsylvania School of Medicine. During the World War he served in the Medical Corps. Upon his return he practiced at Painsdale, Michigan, Wheeler and Fond du Lac, Wisconsin. He was a former President of the Fond du Lac County Medical Society.

He is survived by his widow.

Dr. Arthur W. Loeber, Milwaukee, died on December 29th.

He was born in the year 1904 and was a graduate of Marquette University School of Medicine in 1931. He had practiced in Milwaukee since graduation.

He is survived by his widow.

Dr. Robert W. Lehigh, De Forest, died on January 9th in a Mauston hospital. While walking in the dense fog on January 7th along the highway near Necedah he was struck by the ambulance from the CCC camp and was immediately taken to the Mauston hospital.

Dr. Lehigh was born in the year 1876 and was a graduate of the Chicago College of Medicine and Surgery in 1905. He had practiced at Necedah before coming to De Forest.

He was a member of the Dane County Medical Society, the State Medical Society, and the American Medical Association.

Dr. James M. O'Brien, Oregon, died on January 20th of pneumonia.

Dr. O'Brien was born at Ironton, Sauk County, in 1863. He was a graduate of Rush Medical College with the class of 1890. Up to the time of his illness he had practiced in Oregon for the past forty-two years.

He was a member of the Dane County Medical Society, the State Medical Society, and the American Medical Association.

His wife died seven years ago. Survivors include a brother, William of Reedsburg and two sisters, Mrs. Frank Finnegan, Ironton, and Mrs. B. J. Carroll of Sparta.

SOCIETY RECORDS

New Members

Ray T. Hansen, 1102 S. 16th St, Milwaukee.

Alexander D. Spooner, 425 E. Wisconsin Ave., Milwaukee.

Henry L. Vogl, 435 E. Lincoln Ave., Milwaukee.

Adrien Frankow, 305 South 5th St., Milwaukee.

Simon Moglowsky, 238 W. Wisconsin Ave., Milwaukee.

James G. Garland, Milwaukee County Hospital, Wauwatosa.

John L. Armbruster, 2557 S. Kinnickinnic, Milwaukee.

Alban F. Tessier, 4332 N. Oakland Ave., Milwaukee.

William R. Kennedy, 606 W. Wisconsin Ave., Milwaukee.

Frances K. Gramling, 606 W. Wisconsin Ave., Milwaukee.

V. La Mar Baker, 4808 W. Lloyd St., Milwaukee.

J. R. Bryant, 400—3rd St., Wausau.

J. H. Armstrong, New Richmond.

John A. Litzow, Elderon.

Richard H. Juers, 301½ Third St., Wausau.

Joseph L. Barber, Marathon.

Jean A. Jackson, Mosinee.

Herman C. Lund, Gays Mills.

CORRESPONDENCE

A. C. S. AT ST. PAUL

Saint Paul, January 19, 1935.

Editor, Wisconsin Medical Journal
119 E. Washington Ave.,
Madison, Wisconsin.

Dear Sir: A Sectional meeting of the American College of Surgeons, embracing Manitoba, Wisconsin, North Dakota, South Dakota, and Minnesota, is to be held in St. Paul, March 15-16 and 17th.

On the program will be men of national reputation, some coming from long distances. The Clinic will be given in the mornings and scientific papers and movies in the afternoon and evenings. The entire program is open to all members in good standing of County Medical Societies and all state and provincial districts.

We desire to emphasize especially a welcome to all medical men to attend the program whether they are members of the College or not.

Very truly yours,
DR. GEORGE EARL, *Chairman,*
Local Arrangements Committee.

"UNJUST CRITICISM"

Ashland, Wisconsin, January 14, 1935.

To the Editor of the Wisconsin Medical Journal:

Dear Sir: Your attention is respectfully invited to the attached copy of an editorial appearing in the January number of the Minnesota Medicine entitled "Economical Ashland", on page 43, section of Medical Economics.

ECONOMICAL ASHLAND

From the Saint Paul Dispatch, Thursday, December 13

REMOVAL OF TONSILS TO BE ASHLAND'S GIFT TO SCHOOL CHILDREN

Ashland, Wis., Dec. 13—(AP) Accepting unanimously the suggestion of Mayor J. M. Dodd, a physician, the Ashland city council has voted to have the city finance tonsil removals for school children during the Christmas holidays.

The Christmas "presents" for pupils with infected tonsils will cost the city only $5 each, a saving of $20 to $30 on each case over usual expense. About 50 of 2,500 children need the operation, the mayor estimated, but all pupils will undergo examination.

Parents generally commended the proposal, but pupils have pointed out it will cut down their holiday.

Literally, a double edged Christmas gift for Ashland Boys and Girls. There is a careless holiday air about this offer of Ashland's Mayor and City Council, but it makes light of an operation that is by no means as simple as it sounds.

Wholesale surgery is a dangerous business at any time of year. It may prove of very doubtful benefit to some of these Ashland children. Under these circumstances, no provision could possibly be made for careful consideraton of each case which is so essential before any such serious operation is performed.

As for the doctors who were to perform the operation for the absurd fee—they had much better make no charge at all.

Such an article in the lay press would have been passed by as unworthy of any comment, putting it down to overzealousness or know-it-all attitude of a reporter or columnist. But when a reputable medical journal's editorial department, with physicians in charge, lets its superficial opinion run away with its better judgment, without knowledge of the underlying facts, the undersigned deem it necessary to retort in kind.

By the term "wholesale" it is presumed that the editor meant promiscuous and indiscriminate operating. Nothing is further from the truth. That method of practicing medicine is as extinct as the Dodo. Twenty-five operations by each operator. over a period of ten days, at two hospitals, could hardly be called promiscuous operating.

The children were selected as a result of a medical survey made by local physicians under the CWA. Later they were inspected by the school nurse and examined by the Health Officer and various family physicians. At the hospital prior to operation each patient was examined for any discoverable contraindication to operation (lungs, heart, temperature, ears, urinalysis, coagulation time, etc., etc.) Several showed contraindications and were sent home. Under such conditions the term indiscriminate could hardly be applicable.

We have no hesitancy in stating that in our humble opinion the hospital preparation for the reception of the children; the smooth running of the operation room without fuss or bustle; the after care, with special graduate nurses with the patients both day and night, could not have been much improved upon. This is said advisedly, as considerable experience in clinics, hospitals and postgraduate nose and throat institutions in the large medical centers bears this out.

The patients were not herded and treated as "just a bunch of charity patients", as the writer of the article probably suspects, but received the same care and treatment as would any private patient, whether paying a large or small fee. The writer of the article may not know it but medical practice has not yet fallen to such iniquitous depths, at least in Ashland. The children were brought to the hospital and returned to their homes on discharge by automobile under the personal supervision of the city health nurse. Just where does the "double edged Christmas gift" come in?

From a professional standpoint we are not ashamed of the small part played by us. We agree that a fee of $5.00 is an absurd and ridiculous one when just looked at on the surface, but in this case it is an entirely different matter. The two hospitals and the physicians of Ashland were informed of the need for operation and were asked if they would consider a fee of $10.00 to cover both hospital and operation charges. The city could not pay more for this emergency work and the County or Relief could not handle the matter. Both hospitals and the two nose and throat men offered their services. No person in his right mind would consider that the hospitals would undertake such a proposition from an avaricious viewpoint. And the nose and throat men were not looking for extra oil and gas money.

As the hospitals were generous enough to offer their services in such a cause, the nose and throat men decided to meet the hospitals' offer and make it a fifty-fifty proposition. To have done otherwise and held out for a fee commensurate with the work done, in this particular instance, could not have been justified, even by the ethics of the Minnesota Medicine. We may be wrong in our surmise, and if so an apology is offered, but somehow the writeup smacks somewhat of an outside layman urge with an axe to grind.

The thanks of the patients and their relatives and a letter of appreciation from the office of the

Wisconsin Emergency Relief Administration at Madison more than compensates for the sting of the ill-advised comment in the Minnesota Medicine. The only thing that we feel guilty of is the fact that we did not put CASH ABOVE CONSCIENCE IN OUR WORK. Would we have received the approbation of the Minnesota Medicine had we done so?

If there be any just grounds for criticism of the methods that were followed in handling this so-called Wholesale Tonsil Butchery, we are open both to criticism and suggestions. But we certainly resent the "careless holiday air" accusation.

We respectfully request that, if possible, this reply to an unjust criticism be given to the medical profession of Wisconsin, through the medium of the Wisconsin Medical Journal.

A copy of this letter is being sent to the Editor of the Minnesota Medicine.

Yours truly,

A. Butler, M.D.
R. O. Grigsby, M.D.

Medical Economics

SICKNESS INSURANCE

President Roosevelt: "I am not at this time recommending the adoption of so-called health insurance, although groups representing the medical profession are co-operating with the federal government in the further study of the subject and definite progress is being made." Message on Social Security to Congress, Jan. 17, 1935.

Committee on Economic Security: Continued study with committee meetings scheduled for Jan. 29th and thereafter.

Senator Black, Alabama: Introduced in the U. S. Senate, senate resolution 28,—"Resolved, that the Committee on Education and Labor of the Senate is hereby directed and instructed, either acting through a full committee or through a duly appointed subcommittee, as soon as practicable, to make a full and complete investigation in order to determine the best and most effective kind of Federal legislation to provide a system of health insurance throughout the United States, and to report to the Senate as early as practicable the recommendations outlining the kind of legislation it is believed will most effectively accomplish this purpose." Action by the Senate on this resolution,—none to date.

National University Extension Division: Met at Kansas City on January 26th to determine question for high school debates during fall of 1935 and winter of 1936 in some 41 states, Wisconsin included. Decision to be made known late in February.

American Medical Association: To hold special meeting of House of Delegates in Chicago beginning Friday, February 15th, to discuss social economics questions and sickness insurance.

WELL ORGANIZED

Speaking in Minnesota during December, Dr. Morris Fishbein, editor of the Journal of the American Medical Association, paid an outstanding compliment to the organizations of the State Medical Societies in Minnesota and Wisconsin. Dr. Fishbein declared that proper representation of the physician in medicine and Congress should come from the states themselves and not from a lobby of the American Medical Association at Washington.

"Personally, I have always fought the idea of a so-called 'lobby' for the American Medical Association in Washington," declared Dr. Fishbein. "Lobbyists are in disrepute. They are defined as persons who attempt to wield undue influence and as such are undesirable. The American Medical Association cannot afford to indulge in that sort of thing.

"On the other hand, we do know what is going on and we are represented at every hearing on bills that are of interest to the medical profession.

"When influence is to be brought to bear it should come from the states themselves, not from the American Medical Association. If all states were as well organized as Minnesota or Wisconsin we could write to each of them when an important matter pended and expect really effective action. In comparison with you men in the congressman's district the American Medical Association carries not a particle of influence with Congress.

"The American Medical Association should be known for the great welfare institution that it is, not a lobby for a 'medical trust.'"

COUNCIL SERVICE

Serving without compensation, members of the Council of the State Medical Society of Wisconsin have year after year built an attendance record that is in itself a splendid tribute to their earnestness of effort. During the past twelve years practically every Council meeting has seen a full attendance present. In no instance has any member of the Council been absent unless he himself was sick in bed.

The attendance record of Councilors and Committee members has well been termed "the crowning glory" of the Society.

COLLECTION AGENCIES

Hardly a week passes but some member calls on the Society for aid in his effort to get a report and settlement of some out-of-the-state collection agency. Your Society has a large file on many such agencies. Investigate before you sign.

MORE PROPAGANDA

Two striking instances of how far the propagandists are willing to go in their effort to create a public demand for sickness insurance appeared in the "Doctors, Dollars and Disease" radio program during January. Each broadcast is printed by the University of Chicago Press. William T. Foster, of the Pollak Foundation, gave one urging the insurance principle. On the reprint his name appears as "Dr. William T. Foster." The inference is, of course, that he is a doctor of medicine, which he is not.

Then comes Michael M. Davis, Director of Medical Services for the Julius Rosenwald Foundation, and his associate C. Rufus Rorem in a joint broadcast. Mr. Davis quotes a newspaper clipping reporting a speech by Dr. Fishbein in St. Paul to the effect that "some form of health insurance is necessary." If this were a correct quotation it would be in fact real news. Mr. Davis lives in Chicago and it would take but a telephone call to ascertain the facts. It is needless to add that Dr. Fishbein did not make such a statement.

CREDIT WHERE DUE

All too common among hospital reports is that type of report which tells how many charity patients the hospital cared for free during the year and lists the hospital expense therefor but fails to say a word in recognition of the charitable service rendered by the medical and surgical staffs. A pleasing exception to this "taken for granted attitude" is noted in the annual report of Dr. S. S. Goldwater, Commissioner of Hospitals for the City of New York. In one of the leading statements of the report, Dr. Goldwater calls attention to the fact that the staff gave more than 450,000 separate visits and adds that "for this vast service by an able corps of general practitioners and specialists, not a penny was paid by the city of New York nor of medical service paid by the patients."

It was also of interest to note in the New York report that "department favors (formerly dispensed chiefly under political pressure) whether to contractors, physicians, employees, or selected patients, were banned."

The report further suggests that if the city hospital load continues to increase, it will be well to consider assigning more city patients to voluntary hospitals rather than to continue to acquire large and expensive additional hospital units.

Council Announces Medical Economics Essay Contest Open to General Membership

IN ACCORDANCE with action of the 1934 House of Delegates, all members of the State Medical Society of Wisconsin are eligible to enter an essay contest on "Medical Economics as it Applies to the Life of the Practitioner of Medicine and the Standing of Medicine Within the Community."

An award of $50 will be made for the winning essay which is to be given a prominent position on the 1935 annual meeting program at Milwaukee in September. Judges for the contest selected by the Council are Drs. P. A. Fox, Chairman of the Committee on Medical Economics, Beloit; Stanley J. Seeger, immediate past president of the Society, Milwaukee, and F. Gregory Connell, member of the Editorial Board, Oshkosh.

It is essential that all participants follow precisely the rules of the contest which follow:

1. Any member in good standing of the State Medical Society of Wisconsin is eligible to compete for the prize. Any question arising as to the eligibility of a candidate or the admissibility of his essay will be settled by the decision of the Council.

2. Manuscripts must be typewritten on one side of the paper; they must be double spaced, and they must not be folded or rolled. *Manuscripts must be presented in triplicate.* Illustrations must be marked on the reverse side with the title of the paper to which they belong.

3. Essays must not contain more than three thousand words. In judging a paper the committee will take into account the basic importance of the work and originality of the ideas therein.

4. Papers should be sent, preferably by registered mail, to Mr. George Crownhart, secretary of the State Medical Society of Wisconsin, 305 Washington Building, Madison, Wisconsin. They should be identified by a nom de plume or motto only. A separate envelope should be sent to Mr. Crownhart containing the author's name and his nom de plume or motto, so that after the award is made the name of the writer can be ascertained. Any return addresses or distinguishing marks will be removed

from the wrappers before the papers are turned over to the judges.

5. All papers must be in the hands of Mr. Crownhart before June 15, 1935, in order that the judges may finish their work in time for the annual meeting presentation.

6. The judges reserve the right to withhold the award in the event that no paper comes up to the standard of excellence they feel should obtain.

P. A. Fox, *Chairman.*
Stanley J. Seeger.
F. Gregory Connell.

Wagner Social Insurance Bill Analyzed; Large Health Subsidies to States

A SUBSTANTIAL reenactment of the old Sheppard–Towner maternal-child welfare law, large federal aids for crippled children and a permanent social insurance board to study social insurance questions including health insurance are three features of the Wagner social insurance bill now pending before Congress to carry into effect President Roosevelt's social security program. . A companion bill has been filed in the House.

A social insurance board in the Department of Labor composed of three members appointed by the President is one feature of the bill. Duties of the board in addition to administering the social insurance legislation are to study and make recommendations as to the most effective method of providing economic security through social insurance, and as to legislation and matters of administrative policy concerning * * * health insurance and related subjects.

Under the title "Maternal and Child Welfare" there is appropriated $4,000,000 for each subsequent year beginning July first, next, 95% of which is to be allocated among the states for the furthering and strengthening of "State and local health services to mothers and children, extending maternity nursing services in counties predominantly rural, and conducting special demonstration and research in maternal care and other aspects of maternal and child health service."

For each fiscal year, the sum of $20,000 is to be allotted to each State by the Secretary of Labor and the sum of $1,000,000 is to be apportioned among the States in the proportion which the number of live births in each State bears to the total number of live births in the United States as determined annually by the latest available statistics for the United States Birth Registration Area.

The Secretary of Labor may, further, apportion $800,000 "among States unable, because of severe economic distress, to match by themselves in full the amounts made available" under the preceding paragraph, for their use in matching such sums.

The remainder of the appropriation is to be allocated by the Secretary of Labor for special demonstrations and research in maternal care in rural areas, and in other aspects of maternal and child health.

To receive its allotment a State must make available a similar amount, except under certain circumstances, and through its state agency of health, must submit to the Children's Bureau a state plan which must include "reasonable provision for state administration and supervisory services, for furthering local maternal and child health services administered by local public health units for State financial participation, and for cooperation with medical, nursing and welfare groups and organizations, and must give due consideration to the development of demonstration services or services of a more permanent character in rural and other needy areas or among groups of the population in special need."

If the Chief of the Children's Bureau deems the submitted plan "in accordance with accepted standards of public health practice developed by Federal Bureaus and other agencies," the plan may be approved and the State may thereby qualify for federal aid.

CARE OF CRIPPLED CHILDREN

For the fiscal year beginning July 1, next, and for each fiscal year thereafter, there is

appropriated $3,000,000, to be administered by the Department of Labor, to enable the Federal Government to cooperate with state agencies concerned with providing medical care and other services for crippled children.

The sum of $20,000 is to be allotted by the Secretary of Labor to each State, and the remainder, less administrative expenses, is to be apportioned among the States "on the basis of need as set forth in plans developed by the state agencies concerned and approved by the Children's Bureau."

Except in severe economic distress or other exceptional circumstances, no allotment to a state shall exceed the sum made available by the State for similar purposes.

State plans must be approved by the Chief of the Children's Bureau and must include "reasonable provision for state administration, adequate medical care, hospitalization and after care, and cooperation with medical, health, and welfare groups and organizations."

PUBLIC HEALTH SERVICE

For the fiscal year beginning July 1, next, and for each fiscal year thereafter there is appropriated the sum of $10,000,000 to be administered by the Bureau of the Public Health Service.

The Bureau of the Public Health Service is to allot, anually, $8,000,000 to the several States, "in amounts determined on the basis of the need of each State for such assistance," to develop state health services, including the training of personnel for state and local health work and for the purpose of assisting counties or other political subdivisions of the States in maintaining adequate public health programs.

The sum of $2,000,000 is annually to be made available to the Bureau of the Public Health Service "for the further investigation of diseases and problems of sanitation and related matters."

Minutes of January Council Meeting

THE January meeting of the Council of the State Medical Society of Wisconsin was held at Milwaukee on Saturday, January 5th. Minutes of the meeting follow:

1. **Roll Call.** The Council was called to order at 9:30 A. M., Saturday, January 5, 1935, by the Chairman, Arthur W. Rogers. Roll call disclosed the following present: Councilors, Rogers, Gavin, Smith, Pope, Blumenthal, Dean, Beebe, Duer, Gleason, Johnson, Schiek and Cunningham; President O'Leary, President Elect Carter, Speaker Gundersen, Treasurer Sleyster, Dr. Reginald H. Jackson (Chairman of the Committee on Public Policy), Vice-President Sargent, and the Secretary.

The Secretary reported that the absence of Councilor Stang was due to his severe attack of influenza. Moved by Gavin–Smith that the Secretary communicate to Dr. Stang the greeting of the Council expressing the hope that his full recovery will be had directly. Carried.

Moved by Smith–Blumenthal that the minutes of the September meetings of the Council as published in the Wisconsin Medical Journal for December be approved. Carried.

2. **Election of Chairman.** The Secretary called upon President O'Leary to preside. Dr. Arthur W. Rogers was nominated to succeed himself as Chairman of the Council for the term expiring January, 1936, by Smith–Duer. There being no further nominations, it was moved by Blumenthal–Gavin that nominations be closed and that the Secretary cast the ballot of the Council for Dr. Rogers. Carried unanimously.

3. **Election of Secretary.** With Chairman Rogers again presiding, it was moved by Gavin–Johnson that the Chairman of the Council cast the ballot of the Council for Mr. J. G. Crownhart, Madison, as Secretary of the Society and Secretary of the Council for the term expiring January, 1936. Carried unanimously.

4. **Election of Treasurer.** Moved by Smith–Pope that the Secretary cast the ballot of the Council for Dr. Rock Sleyster of Wauwatosa to succeed himself as Treasurer of the Society and Treasurer of the Council for the term expiring January, 1936. Carried unanimously.

5. **Report of the Treasurer.**

TREASURER'S REPORT
STATE MEDICAL SOCIETY OF WISCONSIN
AS OF DECEMBER 31, 1934

	General Fund	Med. Defense Fund
Balance January 1, 1934	$ 652.13	$ 86.79
Receipts, Interest on Bonds	1,206.66	509.82
Receipts, Dues	25,845.40	1,846.00
Receipts, Exhibit Space	950.00	
Receipts, Annual Meeting Dinner	659.00	
Receipts, Refunds, etc.	82.70	

Receipts, Wisconsin Hospital Association	$ 150.00	
	$29,545.89	$ 2,442.61
Disbursements	28,971.10	1,425.19
Bank Balance in Funds December 31, 1934	$ 574.79	1,017.42

Summary of Funds

General Fund:		
Bank Balance December 31, 1934	$ 574.79	
Investment Securities, listed below	25,000.00	25,574.79
Medical Defense Fund:		
Bank Balance December 31, 1934	$ 1,017.42	
Investment Securities, listed below	11,000.00	12,017.42
Total Cash and Securities		$37,592.21

Investment Securities

Medical Defense Fund:				
Milwaukee County Sewer	1944	4½%	$ 1,000.00	
Wisconsin Gas & Elec. Co.	1952	5 %	1,000.00	
North American Co.	1961	5 %	2,000.00	
Pacific Tel. & Tel. Co.	1937	5 %	1,000.00	
Bell Tel. Co. of Canada	1955	5 %	2,000.00	
Commonwealth Edison Co.	1957	4½%	2,000.00	
U. S. Treasury Bonds	1946	3¼%	2,000.00	11,000.00
General Fund,				
New York State Elec. & Gas Corp.	1980	4½%	1,000.00	
St. Joseph's Congregation, Racine,	1948	5 %	1,000.00	
Wisconsin Pwr. Lt. & Ht. Co.	1946	5 %	1,000.00	
Beloit Water, Gas & Elec. Co.	1937	5 %	1,000.00	
Ironwood & Bessemer Ry. & Lt. Co.	1936	5 %	1,000.00	
Canadian Nat'l Ry. Co.	1969	5 %	2,000.00	
Milwaukee Gas Light Co.	1967	4½%	2,000.00	
T. M. E. R. & L. Co.	1961	5 %	2,000.00	
Wisconsin Public Service Co.	1942	5 %	3,000.00	
American Tel. & Tel. Co.	1936	4 %	4,000.00	
Northern States Power Co.	1941	5 %	4,000.00	
City of Milwaukee School Bonds	1936	4½%	2,000.00	
City of Milwaukee School Bonds	1937	4½%	1,000.00	25,000.00
Total Bonds				$36,000.00

5. Continued. Moved by Gavin–Pope that the report of the Treasurer be accepted. Carried.

6. Report of the Secretary.

Because the formal report for the fiscal year is presented before the House of Delegates in September, this report to the Council is limited to a brief summarization of certain accomplishments and problems particularly deserving of attention at this time.

1. Membership for the year reached 2,140. Your attention is directed to the fact that this is as large a membership as the Society has ever reported.

2. We are advised by the American Medical Association that Wisconsin probably stands alone in the field of medical relief in that free choice of physician exists in fact throughout the federal relief area of this state.

3. The legislative record of your Society for the past twelve years remains intact,—not every measure passed that we advocated but no measure passed that we opposed.

4. Wisconsin is one of the few states that actually had free choice of physician throughout the state for those injured on the C.W.A. program.

5. Wisconsin is one of three states that actually controlled its C.W.A. health program.

6. We again have been able to prepare a comprehensive and yet concise statement of those deductions and depreciations under both state and federal income tax laws which accrue to the members of the medical profession by reason of their occupation. In view of the rapidly increasing rates of taxation, this material is capable of making material if not large personal savings throughout the membership.

7. Your Society was able to both convey and obtain information at Washington in connection with the work of the Committee on Economic Security in the field of sickness insurance.

8. During the months immediately to follow we face three major known problems, the answer to each affecting in a major degree the present security and the future income of our membership. These problems are:

(a) The introduction of legislation calling for a system of sickness insurance in our own state. Bills for this purpose have been drafted by the American Association for Social Security, the Socialist Party, and the American Association for Labor Legislation. Whether or not this program receives an official impetus through developments at Washington, it is already evident that Wisconsin which has already adopted three parts of the four part social security social program of the President is at least seen as fertile ground for the introduction of the fourth part, —sickness insurance.

(b) The question of whether there shall be an occupational tax upon the medical profession as an added source of revenue. In at least one state this tax amounts to $35 per physician per year.

(c) The question of whether or not we shall be able to continue free choice of physician in the relief program under continually changing conditions.

The legislative program of the Society has been placed before you in a mimeographed report by direction of the Committee on Public Policy. Unless the Council wishes to make change, their recommendations will stand as prepared.

Your Secretary is most appreciative of the splendid and outstanding cooperation he has received from members of the Council and the officers of the Society. As time passes and the importance of the work of the Society daily increases, it is more and more essential that the work and accomplishments of the Society be explained to the membership through personal contact. The cooperation of the officers in carrying to county society officers and subsequently the entire membership this material will be of the greatest significance in the year immediately to follow.

6. Continued. The Secretary supplemented his report with an oral statement relating in detail to certain legislative policies of the Society Moved by Johnson–Gavin that the report of the Secretary be accepted. Carried.

7. The Budget. The Secretary presented the following report:

The Budget. The Executive Committee is, as you will recall, the committee to make recommendations to the Council for the budget for the ensuing year. The Secretary lists herewith the budget items of 1934 with the Executive Committee recommendations as to the 1935 program.

Your attention is directed to the fact that we have operated with an unbalanced budget in both the years 1933 and 1934. In other words, in both years the Council has authorized appropriations in excess of income in the amount of $3,500 in 1933, and $3,850 in 1934. In neither year, however, has it been found necessary to actually draw upon the surplus.

Income for the year of 1935 will be an estimated $25,200 in dues from 2100 members; $150 which is paid to the Secretary of the Wisconsin Hospital Association and turned over by the Secretary to the general fund each year; and $1,150 in interest. Thus the anticipated income during the year of 1935 would total $26,500. Your Committee is distinctly of the belief that we should again operate on an unbalanced budget and suggests specifically that in figuring the budget for 1935 we add to the estimated current income of $26,500 the sum of $3,500 from the surplus. This will permit of a budget for the year of 1935 which is not "trimmed" to the point of endangering the success of the Society's broad efforts and at the same time will provide an unappropriated surplus which may be used under direction of the Executive Committee to meet any unanticipated but emergency need. Total budget income for 1935 would thus be $30,000.

It is perhaps needless to say that the Secretary and Treasurer will do their utmost again to perserve the integrity of the Society surplus but it is the joint recommendation of the Treasurer, Secretary, and Executive Committee that there be this leeway which has been granted in each of the last two years so that no formal meeting of the Council need be called in event that an emergency presents itself. The suggested budget follows and a discussion of each item is given at the foot of the budget corresponding with the number of the item in the budget.

Item No.	Purpose	1934 Estimated	1934 Expended	1935 Exec. Comm. Recommendation
1	Salaries			
1a	J. G. Crownhart	$ 6,350	$ 6,350	See Note
1b	Ruth B. Naset	1,890	1,890	$ 1,890
1c	Ellinore Beck	1,530	1,530	1,560
1d	Florence Ripley	1,530	1,530	1,560
1e	G. H. Schroeder	270	270	300
1f	Extra Stenographic Help	500	500	1,020
2	Rent	840	840	840
3	Office	2,750	4,000	3,000
4	Press Service	500	479.10	500
5	Travel	1,200	1,300	900
6	Journal	3,000	3,000	3,000
7	Annual Meeting	1,800	2,151.52	1,800
8	Hygeia	270	223.75	270
9	A.M.A. Delegates	100	112.05	250
10	Public Health Leadership	2,850	100	
11	Legal	600	854.92	600
12	Council - Officers-Committees	1,100	1,500	1,200
13	Special Survey	500		
14	Committee on Public Policy			1,800
15	Totals	27,580	26,631.34*	20,470

1a. In 1929 the Secretary's salary was set at $8,000, $1,200 of which was paid by the Journal. The salary was unchanged in 1930, 1931 and 1932. In 1933 a ten percent reduction was made. In 1934 the Secretary received a $350 bonus for his 1933 accomplishment which had the effect of establishing his 1934 salary as $7,550 ($1,200 of which was from the Journal). The question of his 1935 salary is left open for the determination of the Council.

1b. No increase in salary is asked for Mrs. Ruth B. Naset, R. N., who handles radio, press, Auxiliary, and research work of the Secretary.

1c. In 1932 the salary of Miss Ellinore Beck, stenographic assistant to the Secretary, was set at $1,700. A ten percent reduction was made in 1933 and continued in 1934. The Secretary recommends that at least one-third of this be returned at this time.

1d. In 1932 the salary of Miss Florence Ripley, assistant in charge of membership records, Journal proof, card files, etc., was set at $1,700. A ten percent reduction was made in 1933 and continued in 1934. The Secretary recommends that at least one-third of this be returned at this time.

1e. Mr. G. H. Schroeder is the accountant and business manager at Milwaukee Sanitarium. He handles all the accounts of the Treasurer. He, too, in 1932 had a reduction of ten percent. It is recommended that this be discontinued at this time.

1f. In 1934 extra stenographic help cost the Society in the neighborhood of $500. The work in the office due to the coming legislative session indicates the advisability of adding a full time stenographic assistant at $85 a month rather than relying upon part time stenographic help during the coming year.

SALARY DATA

See Budget Item 1

	1928	1929	1930	1931	1932	1933	1934
J. G. Crownhart	$6500	$7700	$8000	$8000	$8000	$7200	$7550
Florence Ripley	1560	1560	1620	1680	1700	1530	1530
Ellinore Beck..	....	....	1560	1680	1700	1530	1530
Ruth Buellesbach Naset..	....	....	....	2100	2100	1890	1890

The General Duties of *Florence Ripley* are:

1. Receives remittances from county secretaries, handles account books and remittances to state treasurer.

2. Issues membership certificates and handles al. membership records.

3. Handles all correspondence between the State Society and the American Medical Association on membership.

4. Keeps addressograph records of membership, additional Journal mailing list, officers, and hospital mailing list records up-to-date.

5. Addresses by addressograph Journal mailing envelopes, envelopes for the mailing of the Crusader of the Wisconsin Anti-Tuberculosis Association to the membership only, and all bulletins. Also supervises mailing of weekly press service.

6. Corrects proof for the Journal. Three sets of proof are read on each Journal.

The General Duties of *Ellinore Beck* are:

1. Handles all dictation of the Secretary (averages thirty letters a day).

2. Handles the extensive subject files, investigation files, and general files of the office.

3. Assists with the proof reading of the Journal.

4. Compiles the news items, society proceedings, deaths, index and society records for the Journal each month.

5. Prepares, under general supervision of the Secretary, the final copy as it is to appear in the Journal.

6. Handles all advertising contracts of the Journal to see that the ads appear in the proper spaces and in the proper months.

The General Duties of *Ruth Buellesbach Naset* are:

1. Prepares three radio talks each week and delivers them over a hook-up of Stations WHA (Madison), WLBL (Stevens Point), and WIBU (Poynette). Sends copy of radio talks to American Medical Association and other societies requesting to be kept on our mailing list.

2. Prepares the weekly press release of the State Society.

3. Acts as Executive Secretary of the State Woman's Auxiliary.

4. Does the research work assigned by the Secretary preparing data for the Society projects and investigations.

5. Represents the Secretary at constant conferences with Capitol officials to keep the Society posted on state and federal projects and plans.

2. Rent. The Secretary has just had a conference with the building authorities and has persuaded them

that the material reduction in rent should be continued during the year of 1935.

3. Office. Office expense in 1934 exceeded the budget by $1,250. This was entirely due to the wholly unanticipated demands for bulletins and other service as result of the C.W.A. Health Program, the relief situation, and the situation that arose with reference to the imminence for proposals for sickness insurance. The Secretary does suggest some increase over the 1934 budget and believes that he can stay within the suggested appropriation of $3,000 during the coming year.

4. The item for press services remains unchanged. This item covers cost of mimeograph paper and mailing only. The releases are prepared in the Secretary's office.

5. The budgeted item for travel in 1934 was exceeded by $100 due to the two trips to Washington. The legislative session will of necessity require close attendance at Madison and a reduction to $900 seems indicated during the next year.

6. Journal. While the actual deficit incurred by the Journal will exceed somewhat the $3,000 appropriated by the Society a year ago, there has been some slight increase in advertising during the past three months which indicates that there need be no further increase during 1935 in this item.

7. Annual meeting. We exceeded by $350 the budget expense for the Green Bay meeting. This was unavoidable due to insufficient room for commercial exhibits, and (b) increased costs of holding the meeting in Green Bay. The item remains at $1,800 in the 1935 budget but with the meeting in Milwaukee, the secretary believes that very possibly this item may be cut by $300 dependent largely upon the ability to secure additional exhibitors which in turn is dependent upon business conditions in the late spring.

8. Hygeia. By action of the Council a year ago, this appropriation is a continued one. It represents the cost of subscriptions for members of the legislature and other public officers presented each year at Christmas time. The subscription gift list went forward just before Christmas.

9. An increase in the appropriation is necessitated for the expense of the A.M.A. delegates by reason of the fact that the 1935 meeting will be held at Atlantic City and longer travel will be involved as compared with the 1934 meeting held at Cleveland.

10. Public Health Participation. The Council made extensive appropriation for effort in this field but by increased office work reflected in item 3 and some change in plans it was not found necessary to draw upon this appropriation during the current year. Plans now in effect may require some advance in funds from the Society during the year 1935 but such advance will be repaid before the year is over through the fund raising project which is to be commenced in the spring.

11. The budget for legal expense was exceeded by $250, again due to the necessity of having legal counsel accompany the Secretary on his two trips to Washington. This appropriation has been continued for 1935 and it is not believed that more funds than $600 will be required.

12. Council-Officers-Committees. Due to the frequency of committee meetings necessitated by the various emergencies throughout the year the budgeted item was exceeded by $400. It is believed that the suggested item of $1,200 will be sufficient during 1935 despite the fact that the President resides in Superior.

13. Special survey. An appropriation of $500 was made for a special survey in the field of sickness insurance. This survey was not entered upon due to the rapidly changing picture. It may be needed but simply is one of those items that should be left in the discretion of the Executive Committee with no advance appropriation indicated.

14. Committee on Public Policy. The requirements of this Committee during the legislative year were in the neighborhood of $3,600 two years ago by reason of the Wisconsin General Hospital legislation. It is believed that $1,800 would cover the requirements unless we should become involved in a protracted and serious fight on the subject of sickness insurance. In such event again the matter of additional appropriation could be taken up with the Executive Committee.

15. Totals. It is to be noted that the total for the year 1935 column does not include the Secretary's salary in 1a.

Moved by Blumenthal–Duer that the Council appropriate from its surplus the sum of $3,500 to be added to general income for the calendar year of 1935 and that any balance not specifically appropriated in the budget proper be subject to emergency appropriation by action of the Executive Committee. Carried.

The Secretary withdrew from the room during discussion of salaries. Salary increases in items 1c, 1d, 1e, and 1f approved. It was the unanimous decision of the Council that the salary of the Secretary for the calendar year of 1935 be fixed at $9,000 of which $7,800 is to come from the general funds and $1,200 to be paid by the Journal,—an increase of $1,000 over the Secretary's salary of six years ago.

Other items in the budget were approved as recommended by the Executive Committee. Moved by Smith–Cunningham that the total budget of $28,270 be approved. Carried unanimously.

7a. Life Insurance. Dr. Cunningham suggested that the Society should carry a life insurance policy on the life of the Secretary to compensate the Society for loss in event of sudden death. Moved by Cunningham–Smith that this subject be referred to the Executive Committee with power to act. Carried.

8. Remission of Dues. The Executive Committee of the Council recommends that dues be remitted for Dr. E. J. Barrett, of Sheboygan, presently an honorary member of the Sheboygan County Medical Society. Dr. Barrett has long been a member of the State Medical Society of Wisconsin, but has not practiced medicine for many years. During the World War, Dr. Barrett held an administrative office at Washington and is now serving as one of three members of the Society's Contact Committee on Veterans' Problems.

Moved by Blumenthal–Gavin that in view of Dr. Barrett's distinguished service to the Society that dues be remitted. Carried unanimously.

9. Committee on Nursing Education. Under the Wisconsin Statutes, the Committee on Nursing Education of the State Board of Health is appointed every two years from lists containing nominees of various associations. For many years the representative of the State Medical Society of Wisconsin has been Dr. Oscar Lotz of Milwaukee. The State Board of Health officially calls our attention to the fact that we have not submitted a list of nominees

in recent years and asks that we now submit a list of five names. The Executive Committee suggests for consideration of the Council the following nominees:

1. Dr. Oscar Lotz, Milwaukee
2. Dr. R. P. Schowalter, Milwaukee
3. Dr. J. W. McGill, Superior
4. Dr. J. F. Wilkinson, Oconomowoc
5. Dr. A. J. McCarey, Green Bay.

Moved by Cunningham–Pope that the list of nominees as suggested by the Executive Committee of the Council be approved. Carried.

10. Medical Economics Essay. Attention of the Council is directed to page 949 of the December issue, Proceedings of the House of Delegates "Medical Economics Essay." It is to be noted that the Council is instructed to offer a prize for an essay in the field of Medical Economics. The Executive Committee of the Council recommends that a prize of $50.00 and a prominent position in the 1935 annual meeting program be awarded to that member of the State Medical Society of Wisconsin who presents prior to June 15th next the best essay in the field of Medical Economics as it applies to the life of the practitioner of medicine and the standing of medicine within the community; further, that the Council designate as its Committee of judges for such essay contest the following members of the Society:

1. Dr. Paul Fox, Beloit, Chairman of the Committee on Medical Economics, Chairman.
2. Dr. Stanley J. Seeger, Milwaukee, Past–President.
3. Dr. F. Gregory Connell, Oshkosh, Past–President and member of the Editorial Board of the Wisconsin Medical Journal.

Moved by Johnson–Gleason that the recommendation of the Executive Committee be approved in toto with the further provision that the judges selected shall be empowered to formulate rules of the contest. Carried unanimously.

11. Councilor Elections. The Secretary reported that he had suggested, and the Executive Committee approves, a form letter to County Medical Societies to be forwarded on January first of each year in each district wherein a Councilor's term will expire the following September. The Secretary explained that the letter presumably will be read before the Society which would provide ample opportunity for each Society to voice its comment in the presence of its delegate. The suggested letter follows:

Doctor_____ _____, Secretary
_____County Medical Society,
_____, Wisconsin.
Dear Doctor _____:

Will you kindly announce at the next meeting of your Society that the term of your Councilor, Dr. _____ _____, expires with the Annual Meeting of our Society at _____, next September. Councilors are elected for a term of three years. No prohibition exists on reëlection.

While the House of Delegates elects the Councilors, delegates of the district affected are asked to bring in their own nomination or nominations. This notice of pending election is given in accordance with Council action to the end that all members in each affected district may be apprised of the election.

Cordially and most sincerely yours,

After discussion, it was moved by Pope–Smith that the procedure outlined by the Secretary and approved by the Executive Committee be established henceforth. Carried unanimously.

Luncheon recess.

19. Report of Special Committee on Mental Hygiene. Dr. A. I. Rosenberger, Chairman of the Committee, was present to explain the report of the special committee on mental hygiene which follows:

At a meeting of the Committee on Mental Hygiene of the State Medical Society held on December 21, 1934, the following recommendations were made in our preliminary report to the Council of the State Medical Society of Wisconsin:

I. Recommending advocacy of bill number 496A, first introduced by Mr. Young for the Milwaukee County Board on March 11, 1931, to amend subsection one of section 51.11 and sub-section four of section 357.13 of the statutes relating to insane persons guilty of criminal offenses.

SECTION 1. Subsection (1) of section 51.11 and subsection (4) of section 357.13 of the statutes are amended to read: (51.11) (1) Except in the case of commitments made under the provisions of section 357.13 of the statutes, and except as otherwise provided in sections 51.22, and 357.11, and persons adjudged insane by any court, tribunal or officer having lawful authority so to adjudge, or restrained of his liberty because of his alleged insanity, may on his own verified petition or that of his guardian or some relative or friend have a retrial or reexamination of the question whether such person is sane or insane before the judge of any court of record of the county in which such person resides or in which he was adjudged insane.

(357.13) (4) If it shall be determined by the proper authorities of said hospital or home that the insanity or feeble-mindedness of such accused person is incurable he shall be treated and disposed of as persons incurably insane or feeble-minded are required by law to be treated; but no such person shall be removed or discharged from such hospital or home except upon the order of the court having jurisdiction of such person for trial, sentence or commitment.

SECTION 2. This act shall take effect upon passage and publication.

II. Recommending legislation legalizing a commission for criminal cases where there is a special plea of insanity, the commission to act as friend of the court to consist of duly qualified physicians, not more than five nor less than three, the majority of whom shall be qualified psychiatrists.

A. Qualifications for psychiatrists to follow the appointments of the American Board of Psychiatry and Neurology Incorporated, which board will begin to function in January 1935.

III. Recommendations regarding State Hospitals management as follows:

A. Adequate appropriations for the purpose of increasing the quality of personnel: physicians, nurses, attendants.

B. Adequate appropriation for establishment of clean and wholesome living conditions for personnel.

C. Appropriation for establishment of training programs for lay personnel.

IV. It is recommended that the State Medical Society of Wisconsin go on record preferably through the editorials in the State Journal regarding care and treatment of addictions. It is the concensus of opin-

ion of the committee on Mental Hygiene that these individuals can only be cared for adequately by commitment to special institutions, namely, colonies, equipped for psychiatric, social, and economic rehabilitation. That there should be a minimum commitment period of one year, or preferably an indeterminate period. The public should know that incarceration of addicts for short periods of time is medically unsound, economically wasteful, and actually contributes to the delinquency of addicts by making it economically possible for them to continue the use of the drugs.

Very truly yours,

(Signed)

ANDREW I. ROSENBERGER, M. D., *Chairman.*
ROCK SLEYSTER, M. D.
HERBERT W. POWERS, M. D.
JOHN L. GARVEY, M. D.
R. A. JEFFERSON, M. D.

Following an extended discussion it was moved by Pope–Cunningham that recommendation I be referred to the Committee on Public Policy for introduction at this legislative session assuming that the Committee found its legal form to be proper. Carried. Moved by Smith–Pope that recommendation II be referred to the Committee on Public Policy for legal study. Carried. Moved by Gleason–Johnson that III be referred to the Committee on Public Policy as constituting instructions to the Committee for presentation to the legislature in connection with the annual budget. Carried. Moved by Blumenthal–Duer that recommendation IV be referred to the Committee on Public Policy for legal study with power to act. Carried.

12. **Wisconsin Anti-Tuberculosis Association Contact Committee.** The Secretary directed attention of the Council to the fact that Dr. Rock Sleyster, Treasurer of the Society and member of the Council, has accepted a position on the Board of Directors of the Wisconsin Anti-Tuberculosis Association. In view of Dr. Sleyster's new position the Secretary suggests, and the Executive Committee approves, that the earlier special Contact Committee of the Council with the Association be discontinued. Members of the Contact Committee who have served during the past three years are Dr. J. F. Wilkinson, Oconomowoc, Dr. H. M. Stang, Eau Claire, and Dr. Wilson Cunningham, Platteville.

After discussion it was moved by Smith–Pope that Dr. Sleyster and Dr. Cunningham represent the Council in place of the present contact committee. Carried.

13. **Resolution on Hospital Staffs.** At the Green Bay meetings of the Council, in the course of hearing the appeal it was brought to the attention of the Council that one hospital, through its staff, had adopted a resolution precluding the possibility of adding any physician to the staff for a period of five years. It will be recalled that much discussion ensued on this point and the Executive Committee was designated to ascertain the situation in the State and report its recommendations to the general meeting of the Council. Acting for the Executive Committee the Secretary has contacted 70 hospitals throughout the State and finds that 47 have open staffs and 23 have closed staffs. In no instance, however, have any of these hospitals, with either open or closed staffs, any regulations which would prohibit the staff from adding to its membership during the immediate years to follow. The Executive Committee accordingly asked the Secretary to frame a resolution expressing its views for presentation to the Council as a whole. The resolution follows:

WHEREAS, The public health requires that physicians generally associate themselves for practice within hospitals approved by the American Medical Association, and

WHEREAS, Every physician who desires appointment to a hospital staff should be judged upon the basis of his individual qualifications and attainments, and

WHEREAS, It has come to the attention of the Council that one general hospital within the State has adopted a regulation to the effect that no one may be added to its staff for a period of five years regardless of his abilities and qualifications, and

WHEREAS, The Council views such action as wholly lacking in that consideration for brother practitioners which should exist and as detrimental to the public health,

Now therefore be it resolved, That the Council of the State Medical Society of Wisconsin in annual meeting assembled and after a survey of hospital facilities of the State, does hereby condemn as unethical the closing of any non-proprietary hospital staff for a period of years, the effect of which is to utterly deny admission to the hospital staff of a physician without consideration of his professional attainments and his service to his patients.

After thorough discussion, it was moved by Blumenthal–Beebe that the suggested resolution be adopted. Carried unanimously.

14. **Council Awards.** In accordance with precedent, the Executive Committee of the Council presented two recommendations for the 1935 award. Suggestions for future awards were made by Drs. Duer and Pope. After thorough discussion, it was moved by Johnson–Pope that the 1935 Council Awards be granted to the two recommended by the Executive Committee. Carried unanimously.

15. **Malpractice.** By instruction of the Executive Committee of the Council, legal counsel for the Committee on Medical Defense reported in full respecting a malpractice suit at Superior commenced against a physician following his retirement. The physician concerned has continuously carried membership in the Society and in the medical defense fund ever since their respective establishments but dropped medical defense with his retirement. After thorough discussion, it was moved by Schick–Johnson that the member concerned, presently ill, be made a life member of the Society and that medical defense be paid by the Society dating to January 1, 1933. Carried unanimously.

16. **Licensing of Hospitals.** The Executive Committee reported that it has again considered the subject of hospital facilities within the state. It believes that the Council may well consider this subject matter with a view of calling the situation officially to the attention of the State Board of Health and the Governor wherein (a) there are no restrictions upon who may open a hospital or as to the personnel required for a hospital; (b) no restrictions upon what equipment shall be contained in a building which designates itself to the public as being a "hospital"; and (c) wherein it is within the knowledge of members of the Council that proper safeguards for the welfare of the patients from the viewpoint of fire hazard are not always seemingly sufficient.

After general discussion, it was moved by Pope–Blumenthal that the recommendation of the Executive Committee be adopted and that the Secretary be charged with the duties therein outlined. Carried unanimously.

17. **Annual Meeting.** The Secretary announced that the Committee on Scientific Work had selected September 17, 18, 19 and 20 as the 1935 annual meeting dates and requested approval thereof. Moved by Gavin–Duer that approval of the Council of the dates named be granted. Carried unanimously.

18. **Liaison Group.** The Secretary reported progress in the formulation of Constitution and By-Laws for the liasion group authorized by the 1934 House of Delegates. He asked certain questions of policy to determine the wishes of the Council, which were answered without formal action.

20. **New Business.** Questions were raised with reference to the practice of contract physicians in C.C.C. Camps; practice of contract physicians in transient homes; appointments to the Board of Examiners in Pharmacy; dues of city physicians and as to Council action at the September 1934 meeting. No formal action being required, the questions were referred to the Secretary for answer following the meeting.

21. **Report of the Committee on Public Policy.** The Chairman presented the following report:

REPORT OF THE COMMITTEE ON PUBLIC POLICY

Your Committee on Public Policy has had an all-day joint meeting with the Committee on Medical Economics at which legislative counsel was present by request of the Committee. A large number of subjects and proposals were considered in utmost detail by the Committee.

Having in mind that the coming legislative session holds many uncertainties for the profession, some of them of the most serious nature, it was felt extremely advisable to limit the legislative program of the State Society in the matter of introduction of bills to as small a number as possible. The subjects considered by the Committee with their action follow:

1. **Medical Grievance Committee.** Your committee has determined to re-introduce the bill providing for an official State Medical Grievance Committee composed of the Attorney-General or his deputy, the State Health Officer, and the Secretary of the State Board of Medical Examiners. The purpose of the Committee is well known to members of the Council.

2. **Investigator for State Board of Health.** The Committee has determined that as one of its principal objectives it will endeavor to continue (and increase if possible) the present appropriation of $2500 a year to the State Board of Health for the purpose of employing a full-time investigator to weed out major forms of quackery in this State. At the budget hearing the Governor-Elect rather indicated by his questioning that the cost of this work should be financed by a special tax upon physicians such as an annual re-registration fee. Publicity to this was given in all papers of the State. Your Secretary is happy to report that no such proposal will be included in the Governor's budget message and that while he is doubtful as to an increase in the present appropriation, he will at least recommend its continuance.

3. **Model State Narcotic Law.** Your Committee has considered the question of introducing a model State Narcotic Law as adopted by the American Medical Association in conjunction with other organizations interested. The Committee has authorized the introduction of such a bill in the event that the American Medical Association's Department of Legal Medicine, after reviewing the present Wisconsin statutes, feel that the model bill is a needed improvement in this State.

4. The Committee is much concerned about care of the indigent and specifically the continuance of free choice of physician in event that local authorities again finance or direct their own program. The Committee does not know just how free choice of physician might be brought about under a State Law, but definitely has this subject matter in mind in event that legislation shapes itself involving this subject matter.

5. **Sickness Insurance.** It was the sense of the meeting that the Secretary make a separate report to the Council on this subject.

6. **American Graduates of Foreign Schools.** By resolution of the House of Delegates your Committee has studied the subject of how to prevent the licenssure in this State of American students who obtain a medical education abroad which they have not been able to obtain in this country by reason of their faulty scholarship. The Committee is of the opinion that legal counsel should study this question to determine whether or not the objective may be attained satisfactorily through the adoption of a proper rule by the Board of Medical Examiners. In event that this is not possible an appropriate amendment to the law may be introduced.

7. **Illegal Use of the Title "Doctor."** The Committee has made particular study of this subject in accordance with another resolution of the House of Delegates. It is the decision of the Committee that the Society should join with the State Board of Health in asking the Governor to appoint special counsel to take the legal steps necessary to bring about proper enforcement of this statute throughout the State. Unless there is Council objection this procedure will be followed.

8. **Medical Health Officers.** The House of Delegates recommended to the Committee on Public Policy the introduction of legislation providing that health officers in cities, towns or villages of 3,000 or more must be physicians, and that health boards in such communities must include at least one physician. Your Committee has determined, unless there is Council objection, to refer this subject matter and recommendation to the State Board of Health.

9. **Contact between State Board of Health and Medical Profession.** Your Committee has given thoughtful consideration to the resolution introduced in the House of Delegates by the Council suggesting that the Society request the coming legislature to provide

for the State Board of Health such funds as may be necessary to establish a Contact service between the profession and the Board. Unless there is Council objection the Committee will signify to the State Board of Health its willingness to appear before the Legislature in support of any measure to this end which is introduced by the State Board of Health.

10. **Care of Epileptics.** Your Committee has considered the House resolution recommending that it urge on the Board of Control and the Wisconsin Legislature the need of special provision for the proper care, treatment and education of epileptics. Your Committee feels that it will have best discharged its function when it reports its recommendations jointly to the State Superintendent of Schools and the State Board of Control.

11. **Prenuptial Examinations.** Your Committee has carefully considered the resolution introduced into the House by Dr. W. C. Henske of Chippewa Falls and referred by the House to the Committee. It has determined to re-refer this resolution to the State Board of Health unless there be Council objection.

12. **County Public Health Departments.** Your Committee has given particular attention to a study of the present State Enabling Law. It is the belief that amendments are required to perfect it and will recommend, unless there be Council objection, that the State Board of Health give particular study to this subject with a view to securing needed amendments at the coming legislative session.

13. **Chiropody Law.** The Committee has considered seven separate requests for amendments to the Wisconsin Chiropody Law submitted by the Wisconsin Chiropodist Society. Unless there be Council objection it will advise the Society that it has no objection to amendments to increase the preliminary educational requirements for chiropodists from three years high school to four years high school and one year of college, effective July 1, 1940; to appoint three examiners in Chiropody instead of one; to providing for an annual $2.00 re-registration fee, and to elaborating upon the causes for revocation of license. The Committee, unless there is Council objection, will advise the Society that it cannot accept and must oppose suggestion that the right of chiropodists shall be extended to include "fungus and adhesive dermatitis."

14. **Automobile Accident Cases.** The Committee has given particular attention throughout the year to the subject of proposed lien laws. It feels that the objective of the law can be accomplished in a more simplified form and legal counsel is presently drafting a bill to that end which will be introduced in the coming session of the legislature.

15. **Hypnotic Drugs.** The Committee has determined to refer to the State Board of Health for their consideration the question of presenting a bill amended to limit the counter prescribing of hypnotic drugs.

16. **State Liquor Laws.** Except as it may incorporate the subject into some other pending bill, the Committee will not of itself ask for legislation to exempt physicians from the tax on alcohol and liquor used in the course of their professional practice. The Committee feels that the matter is of minor significance.

17. **Estates of Deceased.** The Committee has decided to refer to the State Conference of Social Work the question of introduction of legislation to limit preferred claims under the heading of "Burial Expense."

18. **Composition of Board of Medical Examiners.** Your Committee has determined to refer to the Governor the question of whether he desires to recommend change in the composition of the Board at this time.

19. **Compensation Act.** The Committee is aware that there may be violations of a provision in the Act which prevents employers from collecting funds from employees for the purchasing of medical or hospital treatment required to be furnished by the employer. It is the decision of the Committee that the investigation of this situation can well await adjournment of the legislature.

Respectfully submitted,

J. G. Crownhart,
Secretary for the Committee.

There being no dissenting vote, the report of the Committee on Public Policy was approved.

22. Appointments. The Chairman announced the reappointment of Drs. Blumenthal and Gavin to be members of the Executive Committee for the term expiring January, 1936, and the appointment of Dr. F. W. Pope to be a member of the advisory committee to the Woman's Auxiliary for the term expiring January, 1938.

23. Adjournment. The Council adjourned at 4:45 P. M.

J. G. Crownhart,
Secretary.

Approved:

Arthur W. Rogers, M.D.,
Chairman of the Council.

Senator Copeland Introduces Modified Drugs and Foods Bill in Congress; Explains Changes

INTRODUCED on the second day of the new session, Senate Bill 5 (S. 5) by Senator Copeland provides for closer federal regulation of both the sale of drugs and foods. In introducing his new measure, Senator Copeland presented the following statement in the Senate:

For a number of years the Food and Drug Administration has been embarrassed by weaknesses in the food and drug laws. The original act was a revolutionary and epoch-making piece of legislation. It will ever stand as a monument to the great pioneer in pure food and drugs, Dr. Harvey W. Wiley.

Naturally, during a period of more than a quarter of a century, there would arise new problems and the necessity for further protection of the public. Court decisions have clarified and in some instances befuddled the law. The officials of the Administration have been embarrassed by reason of weaknesses which have become apparent through the progress of invention, discovery, and legal procedure.

In June 1933 a bill was presented after numerous conferences in the Department of Agriculture with the various industries affected. When that bill reached the Senate there arose a good deal of op-

position. Days and weeks of hearings resulted in numerous revisions. The measure laid on the desks of Senators today differs from S. 1944 of the Seventy-third Congress in several particulars. Some of them are the following:

The first bill gave to the Secretary conclusive power as regards questions of fact. This is now left to the court if a contest arises.

The old bill did not include any provision for court review of regulations. While that right existed under the common law, it has seemed wise to write into the bill a provision providing specifically for such review.

In place of the official authority given the Secretary under the original bill to promulgate rules and regulations, this bill sets up two committees for the formulation of regulations. These are a committee on public health and a committee on food standards.

The original bill required a declaration of ingredients to be placed upon the package reaching the consumer. The industries affected resented this because of what they regard to be their proprietary rights in the formulae. This feature of the first bill and of its successors in the last Congress created much discussion.

In the measure now pending, equal protection of the public is accomplished by another method. Unless the package carries the names and quantities of the ingredients contained therein, this information must be filed with the Department. Such action will permit the Food and Drug Administration to make certain that no incompatibles, harmful substances, or unwholesome products are sold to the American people. Existing law is not changed in that the Department will continue to make its own analyses of products and to advise the public of any wrongful or fraudulent claims for them.

It is the purpose of this bill, not alone to protect the public, but what is likewise important, to protect the industries involved. To this end the committees which are provided by the bill include representation from the industry affected so that it may have abundant opportunity to state its side of the case.

There was much criticism of the original measure due to the misunderstanding of why there was an enumeration of diseases in which self-medication might be dangerous and a proscription of advertising "cures" for such diseases. The list was so long that there arose a fear on the part of the public that the individual would no longer be permitted to buy any favorite preparation and to take it under the directions of the label.

Of course, that was not the intent or the letter of the proposed law, but, nevertheless, it was used as a weapon against its passage. In this bill the diseases for "curing", the advertising of which is prohibited, have been limited to cancer, tuberculosis, venereal diseases, and heart and vascular diseases. These are the diseases for which the virtues and values of remedies have been advertised and which the scientific world believes to be unsubstantiated. The list in this bill is limited, but may be added to from time to time as the Committee on Public Health may recommend.

As to the method of the selection of this Public Health Committee, it is well to quote from the bill. This committee is to "consist of five members designated by the President with a view to their distinguished scientific standing and interest in public health and without regard to their political affiliations." Personnel so chosen must appeal to the American people and guarantee the reasonableness and scientific worth of their conclusions.

There was much complaint from berry growers and others regarding the restrictions placed upon the sale of fresh fruits and vegetables in packages. The bill before us exempts natural products sold in open containers.

The small manufacturers and producers complained of a provision in the original bill providing for "voluntary inspection" of factories. It was testified that the inclusion of this provision in the bill would result, in fact, in mandatory inspection with the expense of inspection for each and every factory. As a matter of fact, the administration was aiming at the control of certain sea foods. The last Congress passed an amendment to the Food and Drug Act providing for voluntary inspection of the establishments producing these foods. It has worked well in practice and all parties interested believe it should be continued for those particular products as has been done. The bill does not apply this feature to other substances.

The original bill excited criticism because the Food and Drug Administration was authorized to make what are known as "mass multiple seizures"; that is, if a single package or case of a given product was found to be below standard or unwholesome, the entire product of that factory or industry could be seized wherever found in interstate commerce. There never was any complaint on the part of industries affected when the seizures were made because the products were unwholesome, deleterious, or harmful. There was complaint that the Department might begin proceedings in border-line cases where the health factor was not involved and do so in several parts of the country simultaneously, putting the industry to great expense in defending many suits at the same time.

In view of the fact that this bill provides for injunction proceedings, such authority for wide-spread seizures in border-line cases, involving merely the question of deception, is not needed. The abuse, if the courts sustain the Department's position, can be readily stopped through bringing injunction proceedings in the court where the manufacturer resides and securing a prompt judicial determination of the issues. This method of procedure is provided in the pending bill. It gives the public exactly the same protection as originally contemplated, but it reaches that desired end by a short cut and also assures against the abuse of administrative power.

In the original bill there was great complaint on the part of the advertisers because of the language chosen, which set up a prohibition against false advertising, not alone because it was false or misleading, but also because of possible "ambiguity or inference." With the great power given to the Secretary in the original bill, it was felt that injustices woud follow the administration of the act without actually giving the public any degree of added protection.

As a matter of fact, all needed protection can be given a prohibition against false or misleading statements in advertising. Similar language in the present law applicable to the labels has been effectively protective of consumer interests, and at the same time has not been construed as unduly embarrassing to honest producers. This bill applies exactly the same principle to the matter of advertising as existing law does to labeling.

It is felt by those who have gone over the bill carefully that its arrangement is more orderly and capable of better understanding. Certainly the bringing together of similar subjects under appropriate chapter heads makes the bill better suited to study and practical use. A great deal of discussion over the bill as originally introduced undoubtedly arose because it was difficult to follow and understand.

The bill is now in form and ready for study by everybody having an interest in food and drug legis-

lation. If it is enacted into law, the health and welfare of our people will be given much greater protection. It will place no undue burden on honest industry.

It is hoped there may be speedy enactment of the measure; but, of course, this will not be attempted until there has been plenty of time to digest its proposals.

Congress of Physical Therapy at Madison

THE American Congress of Physical Therapy announces a one-day session of its Mid-Western Section to be held in the Auditorium of the Service Memorial Institute, Madison, Wisconsin, Tuesday, March 12, 1935.

The morning session will be devoted to hospital clinics and the afternoon session to scientific papers. The evening program will be conducted under the auspices of the section and the Dane County Medical Society.

The Program is as follows:

CLINICS

9–10 A. M. *Wisconsin General Hospital*—Physical Therapy in Fractures, James Jackson, M. D., Madison.

10–11 A. M. *Wisconsin General Hospital*—Physical Treatment in Postural Defects, Helen Denniston, M. D., Madison.

11–12 A. M. *Children's Hospital of Wisconsin General Hospital*—Physical Therapy in Poliomyelitis and in Postoperative Cases, J. C. Elsom, M. D., Madison.

AFTERNOON SESSION

2 P. M. Physical Therapy in Relation to Orthopedic Surgery, F. H. Ewerhardt, M. D., Assistant Professor of Physical Therapeutics, Washington University School of Medicine, St. Louis.

Management of Cancer of the Nasal Accessory Sinuses, Francis L. Lederer, M. D., Professor and Head of the Department of Laryngology, Rhinology and Otology, University of Illinois College of Medicine, Chicago.

Physical Therapy in Postoperative Conditions, Robert E. Burns, M. D., Associate Professor of Orthopedic Surgery, University of Wisconsin Medical School, Madison.

Status of Electrosurgical Resection, H. C. Rolnick, M. D., Professor of Urology, Loyola University, Medical School, Chicago.

Physical Therapy in Relation to Arthritis, John Stanley Coulter, M. D., Associate Professor of Physical Therapy, Northwestern University Medical School; Council on Physical Therapy, American Medical Association.

Physical Therapy in Relation to General Surgery, Arnold S. Jackson, M. D., Jackson Clinic, Madison.

EVENING SESSION

8 P. M. Modern Concepts of Physical Therapy in Medicine and Surgery, Harry E. Mock, Sc. D., M. D., Associate Professor of Surgery, Northwestern University Medical School; Chairman Council on Physical Therapy of American Medical Association.

Aids in Rehabilitation, F. J. Gaenslen, M. D., (Milwaukee, Wis.,) Professor of Orthopedic Surgery, University of Wisconsin Medical School, Madison, Wis., Council on Physical Therapy, American Medical Association.

For program address Marion G. Smith, Executive Secretary, AMERICAN CONGRESS OF PHYSICAL THERAPY, 30 North Michigan Avenue, Chicago, Illinois.

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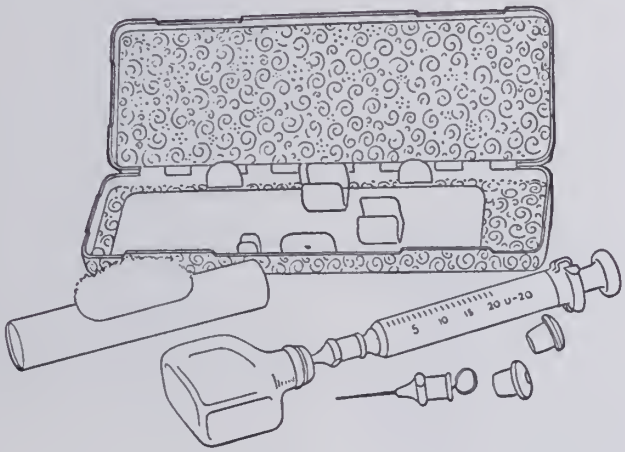

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BOOKS RECEIVED FOR REVIEW

Disease, Gadfly of the Mind. By William Allen Pusey, M.D., Sometime President of the American Dermatological Association and of the American Medical Association. H. K. Lewis & Co., London.

Practical Endocrinology. By Max A. Goldzieher, M.D., endocrinologist, Gouverneur Hospital; chief of endocrine clinic, Gouverneur and Brooklyn Women's Hospital; former professor of pathology, Royal Hungarian University, Budapest. D. Appleton–Century Co., New York.

Standard Classified Nomenclature of Disease. Compiled by the National Conference on Nomenclature of Disease. The Commonwealth Fund, 41 East 57th St., New York, N. Y.

How to Practice Medicine. By Henry W. Kemp, M.D., New York. Paul B. Hoeber Co., New York. Price $2.50.

Sculpture in the Living. By Jacques W. Maliniak, M.D., formerly major, Reconstructive Hospitals, Allied Armies, etc. The Lancet Press 80 Lafayette St., New York, N. Y.

The 1934 Year Book of General Surgery. Edited by Evarts A. Graham, M.D., professor of surgery, Washington University School of Medicine. The Year Book Publishers, 304 South Dearborn St., Chicago, Ill. Price $3.00.

Body Mechanics. By J. E. Goldthwait, M. D., member of Board of Consultants, Massachusetts General Hospital. J. B. Lippincott Co., East Washington Square, Philadelphia, Pa. Price $4.00.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

Periodic Fertility and Sterility in Woman. By Prof. Herman Knaus, Head of the clinic for Gynecology and Obstetrics of the German University of Prague. Obtainable in United States and Canada at the Concip Company, Hobart, Indiana.

This book, the author of which is one of the two pioneers in this field, is the best of several which have appeared recently dealing with the so-called "safe" and "fertile" phases of the menstrual cycle. Knaus has marshalled a formidable array of scientific evidence, to which he has added a number of physiological experiments of his own, favoring his theory. Certainly the, as yet, meager clinical evidence available adds weight to the experimental data.

The pioneering investigations of Knaus and of Ogino on the periodical variations in fertility and sterility are generally considered solely as a means of preventing conception. Should further clinical evidence prove the correctness of their view undoubtedly it will prove not only of great value in this field but of equal importance in cases of functional sterility.

This work deserves the serious consideration of all interested in human reproduction and Knaus's book is the best of several on the same subject with which this reviewer is acquainted. The translation has been well done and the illustrations are clearly reproduced. J.W.H.

The 1934 Year Book of General Medicine. Edited by George F. Dick, M.D., Professor of Medicine, University of Chicago; Attending Physician, Billings Memorial Hospital; Lawrason Brown, M.D., Chairman of the Medical Board, Trudeau Sanatorium, Saranac Lake, New York; George R. Minot, M.D., S.D., F. R. C. P. (Hon.) Edin., Professor of Medicine, Harvard Univ.; Director, Thorndike Memorial Laboratory; Visiting Physician, Boston City Hospital; William B. Castle, M.D., A.M., Associate Professor of Medicine, Harvard University; Associate Director, Thorndike Memorial Laboratory; Junior Visiting Physician, Boston City Hospital; William D. Stroud, M.D., Professor of Cardiology, Graduate School of Medicine, University of Pennsylvania; George B. Eusterman, M.D., Chief of Section in Medicine, Mayo Clinic; Chief of Gastro–Enterologic Clinic, Associate Professor of Medicine, University of Minnesota (Mayo Foundation). The Year Book Publishers, Inc. 1934.

The Year Book has come to occupy an assured place in the medical literature. Constituting as it does the abstraction of representative articles over a wide field by internists especially interested in limited branches of internal medicine, the several articles have an unusual value to the general practitioner of more limited opportunity, by reason of the wide field which he must cover.

A previous occasion has been taken to commend the editors of this volume for their critical notes. This feature which has been recently introduced into the Year Book is by no means abused and it definitely affords the reader a controlled viewpoint which might be lacking in the casual reading of an impressive article. Certainly this volume constitutes a compilation of unusual value, which should be available to every practitioner of medicine. W.S.M.

Bronchoscopy, Esophagoscopy and Gastroscopy. By Chevalier Jackson, M.D., professor of bronchoscopy and esophagoscopy, Temple University,

One of a series of advertisements prepared and published by PARKE, DAVIS & CO. in behalf of the medical profession. This "See Your Doctor" campaign is running in the *Saturday Evening Post* and other leading magazines.

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and Chevalier L. Jackson, M.D., professor of clinical bronchoscopy, Temple University. Third edition. W. B. Saunders Company, Philadelphia. Cloth $9.00 net.

This book, the third edition, is a complete technical description for the specialist in his procedures in diseases of these organs.

There is included a detailed description of all endoscopic procedures. Additions from the previous editions of this text consist mainly of new advances in diagnostic work—the foreign body material remaining essentially as described in earlier publications. New advances in technique in the use of the biplane fluoroscope in foreign body removal is fully detailed and is an especially interesting addition. This book still remains the authority of endoscopic diseases and procedures. W.M.N.

Tumors of the Female Pelvic Organs. By Joe Vincent Meigs, M.D., instructor in surgery, Harvard Medical School. The Macmillan Company, New York, New York. Price $6.00.

The author has assembled the benign and malignant tumors of the female genital organs. In addition the pathology of these tumors has been correlated with clinical symptoms, diagnosis, prognosis, and treatment. The survey has been taken from large hospital experience. The illustrations are to be commended.

This book can be highly recommended as a most important contribution in the pathology of pelvic tumors in the female genital organs. R.E.C.

Manual of Clinical Laboratory Methods. By Pauline S. Dimmitt, Ph. G., Medical technologist for the Stout Clinic, Sherman, Texas. Price $2.00. F. A. Davis Company, Philadelphia.

This little book is a clinical laboratory manual in which the author describes those tests which in his practice have been found to be most useful for routine diagnostic purposes. The tests described are good ones and technicians will find it a convenient reference for commonly used clinical laboratory methods. W. D. S.

Disease, Gadfly of the Mind. By William Allen Pusey, A. M., M. D., L. L. D., sometime President of the American Dermatological Association and of the American Medical Association. H. K. Lewis & Co., London. 20 pages.

This essay was presented as the Prosser-White Oration before the Dermatological Society of the Royal Society of Medicine, in London, June, 1934. It gives a charming sketch of the important part played by disease, and especially by cutaneous disease, in stimulating the growth of human knowledge. C. R. B.

A Text-Book of Pathology. By E. T. Bell, M. D., professor of pathology, University of Minnesota. Price $8.50. Lea & Febiger, Philadelphia.

It is difficult to condense even the foundation facts of pathology into a 750 page text-book, yet Bell and his collaborators have been more than moderately successful in their attempt. In the discussion of matters of opinion the book is commendably brief. It seems unfortunate, however, to one who has been teaching pathology for many years, that in attempting to cover much ground in a limited space, the authors have slighted the histological picture of many lesions, leaving too much for supplemented instruction either in lecture room or laboratory. In some parts the book becomes little more than a catalogue of possible lesions.

The illustrations are in general good, although a few photomicrographs are subject to the criticism that they do not adequately fulfill their purpose.

In general the book may be recommended to beginning students. C. H. B.

Practical Endocrinology. By Max A. Goldzieher, M. D., endocrinologist, Gouverneur Hospital; chief of endocrine clinic, Gouverneur and Brooklyn Women's Hospital; former professor of pathology, Royal Hungarian University, Budapest. D. Appleton-Century Co., New York.

This volume is to serve three purposes and it may be judged in the light of those purposes. It is to present a survey of symptoms which will lead to the diagnosis of the underlying glandular condition. In this respect it is an abbreviation of the descriptive type of endocrinology which has been represented by several other more extensive volumes in the last decade. Many of the illustrations are copied from these earlier volumes. Diagnosis by means of these symptoms is still notoriously undependable.

The second purpose is to describe the systematic application of procedures by which the diagnosis of endocrine disturbance can be ascertained and the individual glands responsible identified. The author frankly follows the lead of A. W. Rowe and the methods which are presented have certainly not been demonstrated to be uniformly dependable for these purposes.

The third objective is to present methods of treatment that have proven useful. The perusal of the pages on therapy shows them to lack definiteness as to the dosage employed, the exact preparation to be chosen and the criteria for the guidance of treatment.

It has often been said that very few things in this world are black or white—that there is much more gray. This statement would apply to the volume in question. Theer are very many interesting and some very true presentations. In other cases there is much which is either traditional or represents a certain point of view rather than demonstrated facts. Mention might be made of the definite statement that the thyroid gland produced several hormones, a statement which is not accepted by most people. Again, the author states that the adrenal cortex produces several hormones. He has done considerable work in this special field, but his presentation is certainly not convincing as to the plurality of the products of this gland. Again, he refers to the use of stimulating doses of x-ray.

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—Proc. Soc. Exp. Biol. and Med., 1934, **32**, 241-245.

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The tendency of most careful students of irradiation is to deny that there is such a stimulating action. It is to be noted that the author makes great use of stimulation by diathermy with rather dubious evidence of its value.

The book can certainly not be recommended as a guide for the general practitioner or the specialist in endocrinology. Its interest lies chiefly in showing the point of view of a certain group of clinical endocrinologists in 1934. E. L. S.

Treatment By Diet. By Clifford J. Barborka, M. D., Department of Medicine, Northwestern University Medical School, Chicago. J. B. Lippincott Co., Philadelphia.

This volume is an unusually excellent piece of writing for the man in the general practice of medicine or the physician who specializes in internal medicine. It presents adequate concrete details to enable the physician very quickly to instruct his patients in whatever type of diet is necessary. There are very few recipes in the book. The diets are made to be prepared from the foods which are used for most American tables at present. Attention is, therefore, given to economy and to the psychological problem of the individual who is to be kept continuously on a special diet. The range covered by the book involves practically every sort of diet which is in current use in clinical medicine.

This book will be useful to the physician whose medical training preceded the knowledge of the vitamins, minerals and the quantitative study of diabetes mellitus. The essentials of these matters are presented very concisely in the introductory chapters. In addition, this book will appeal greatly to the later generation of clinicians, for the author begins the treatment of each clinical entity by a statement of the aims of treatment, the principles used in selection of food, and he has always a very definite criterion for each step in the process. The book is possibly a little more extensive in the number of menus suggested for any clinical condition than would be necessary. This will, however, be appreciated by clinicians who want some leeway in the choice of diets. It can be certainly recommended for general use. E. L. S.

How to Practice Medicine. By Henry W. Kemp, M. D., New York. Paul B. Hoeber Co., New York. Price $2.50.

The title of this rather diverting series of essays might well be changed to "How One Physician Would Practice Medicine". Certainly the entire approach is a new one; but the prefatorial sentiment that suggests a royal road to the practice of medicine does not find answer in the succeeding pages.

Probably the most important single function which this small volume fulfills is the insistence upon the superior plane of the general practitioner. However, the reviewer does not admit the recurrent reference to the omniscience of any practitioner. Rather than depreciating consultation the proper attitude should be the intelligent use of this time-proved adjunct to a complete professional service. In one attitude toward the specialist, however, one must be in complete agreement, namely the necessity for a broad general insight on the part of the individual practitioner, before he aspires to a specialty.

Generic objection is found to certain further comments relative, for example, to matrimony on the part of young physicians, partnerships, proprietaries and other details. Certainly one cannot accept without distinct reservation the unqualified recommendation of a given automobile or a given biscuit, not to mention the more vicious suggestion of certain proprietary drugs. Nor is the essayist convincing in his choice of literary outlet for the prospective physician. Certainly Osler's bedside library will be more satisfying to the young practitioner than will be the recommended volumes by Hilton and Cathell. A multiplicity of subjects is covered; but when the detail of personal attire reaches the recommendation of specific trade-named cravats, it is going a bit too far. It is interesting that in spite of a most detailed consideration of the approach to the patient in the office and the home the advice is given against the presence of a third party in making pelvic examinations, certainly a practice which may pave the way for unjust charges against the practitioner, whether he be young or old. Truly the practice of medicine is changing and there may be occasions when a physician is justified in withholding his advice and assistance from irresponsible families, but the development of a black list is rather poor form and must be entirely individualized to avoid hardship and injustice in the individual case. The objection to the metric system are too puerile for discussion; but there are some points to be offered in explanation of its slow adoption in this country.

From these details it may be gathered that the reviewer was not impressed by the profundity of the presentation. There are, however, many points of real practical importance which are well expressed and which cannot help but prove impressive. After a period of practice every physician will have developed certain rules of procedure and this need may well be anticipated by such a volume. If there were one conspicuous criticism applying to the entire text, it would be directed toward the inclusion of details of occasional practice or routine in pediatrics and other subjects. Objection, furthermore, might readily be taken to certain of the shotgun prescriptions and again the criticism voiced in the matter of the inclusion of such details holds here. The mere fact that the directions are explicit opens the way for such discussion, but by the same token such materials may be very attractive to the uninitiated. There is no place in such a text for the occasional rather pointed story. W. S. M.

The 1934 Year Book of General Surgery. Edited by Evarts A. Graham, M. D., professor of surgery, Washington University School of Medicine. The

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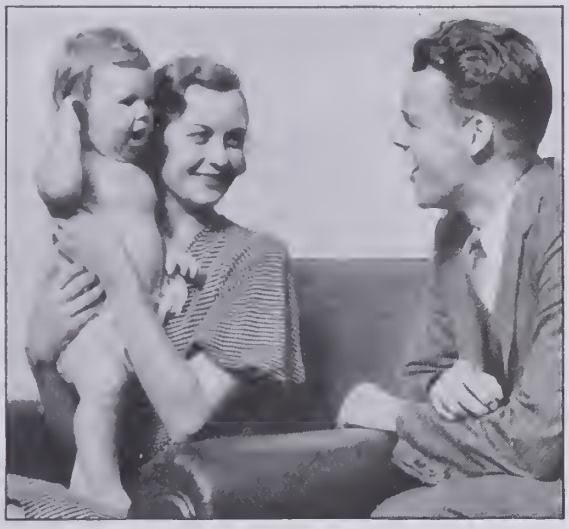

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Year Book Publishers, 304 So. Dearborn St., Chicago, Ill. Price $3.00.

This volume consisting of 772 pages with an excellent index, numerous illustrations, tables, and references gives a surprising amount of information regarding the trend of general surgery during the past year. If one desires more details, he has only to follow the references given on every page.

Particular attention has been given to the new anesthetic agent Evipan.

The danger of infection from the use of inefficient face masks is also discussed, and some very valuable information is available.

Each year the chapter on Thoracic Surgery is discussed in more detail due to its rapid development in the field of surgery.

The author has added his personal opinion on various subjects throughout the volume which adds greatly to its value. J. W. G.

Standard Classified Nomenclature of Disease. Compiled by the National Conference on Nomenclature of Disease. The Commonwealth Fund, 41 East 57th St., New York, N. Y.

One of the greatest handicaps to accurate comparison of hospital records has been the lack of a standard nomenclature of disease. This volume approved as it is by twenty-seven national societies should be given consideration by the record committees of all hospitals. It is the most complete volume of its kind and any hospital starting its record room can adopt this as a standard, without hesitation. Many hospitals with other record systems have changed to the standard classification, but this change has at times been attended by certain mechanical difficulties. Fundamentally, there is no reason why the classification cannot be adopted. R. C. B.

The Patient and The Weather. By W. F. Petersen, M.D. Edwards Brothers, Inc., Ann Arbor, Michigan.

This volume, the third in a series of studies of the response of the individual to the meteorological environment, presents the interesting opinions of the author as well as those of others, and also the detailed reports of clinical observations on the probable relation of meteorological variations to the varying phases in mental and nervous diseases. There is a vast amount of information in this book that is worth while to both the physician and the meteorologist. This wealth of material is presented in a very readable manner, and the discussion of factors in neuro-psychiatric states is comprehensive. The work gives the reader a new "point of view", which is the author's intent, toward this comparatively neglected subject and cannot help but stimulate the interest of clinical and preclinical scientists.

The clinical reports are interesting and should be helpful to those clinicians engaged in this field of work. The real value of the book is the permanent record of painstaking observations for the benefit of future investigations. It is a contribution to the medical sciences well worth reading. J.S.E.

The Heart Visible. By J. Polevski, M. D., attending physician and cardiologist, Newark Beth Israel Hospital. A clinical study in cardiovascular roentgenology in Health and Disease. F. A. Davis Company, Publishers, Philadelphia. 1934. This work is an effort to relate changes in the heart and great vessels, as determined from teleroentgenograms or by fluoroscopic examination, with clinical lesions of the heart, precardium and great vessels. Alterations in shape of the heart receives much more consideration than cardiac mensuration. It is profusely illustrated with teleroentgenograms of the heart and great vessels in various pathological states and with diagrams showing the position and relation of important structures in different views. Little attention is given to orthodiagraphy or to accurate cardiac mensuration in an effort to separate the enlarged heart from the one of normal size. Diameters alone are employed and reference made only to average normal data relating to the body weight of the subject. The "cardio-thoracic" ratio, now recognized as of little value in differentiating enlargement, is unfortunately presented as important. If the work, however, will stimulate greater interest on the part of the roentgenologist in this important and much neglected field and will point out to the clinician the invaluable aid that the x-ray supplies in cardiac diagnosis, it will render a valuable and timely service. The text is clear, the printing excellent and the illustrations well selected. A bibliography is appended arranged to supplement the different subjects treated in the text.—J.A.E.E.

ANEMIA

(Continued from page 111)

pearance of the patient, the puffiness of his tissues, the slowness of his speech and reactions, and the coarseness of his voice. In other words, myxedema should be recognized on sight. If it is not so recognized, many useless examinations and special tests will be made before it finally occurs to the physician, to his embarrassment, that he has been enveloped in diagnostic fog. For what was regarded by him as a very unusual type of anemia, possibly a new disease, only proper dosage of thyroid extract was needed.

COMMENT

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By Francis D. Murphy, M. D.
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TABLE OF CONTENTS PAGE 156

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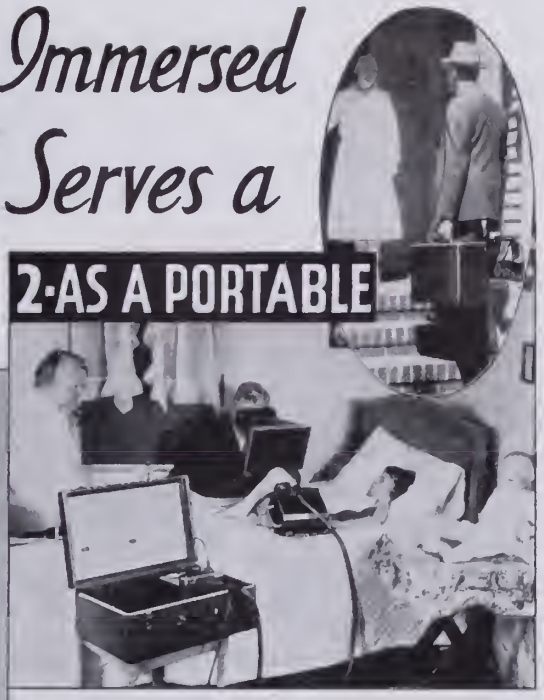

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TABLE OF CONTENTS

ORIGINAL ARTICLES

Page

Cardiac Pain; The Differentiation of Genuine Cardiac Pain from Conditions Simulating It by Francis D. Murphy, M. D., Milwaukee ---- 163

Spontaneous Subarachnoid Hemorrhage; Report of 12 Cases by Mabel G. Masten, M.D., Madison ---- 168

Drug Hypersensitivity As a Cause of Acute Primary Granulocytopenia by Theodore L. Squier, M.D., and Frederick W. Madison, M.D., Milwaukee ---- 175

The Complete Dissolution of a Large Renal Calculus by Walter M. Kearns, M.D., Milwaukee 179

Abnormal Positions of the Kidneys by W. G. Sexton, M.D., Marshfield ---- 184

Report of Two Cases of Unilateral Postencephalitic Parkinsonian Syndrome by E. M. Jordan, M.D., Green Bay ---- 185

EDITORIALS

Urinary Tract Calculi ---- 186

A Reminder ---- 187

Dan. V–VII ---- 187

Hyperparathyroidism and Urinary Calculi ---- 188

MISCELLANEOUS

Page

Society Proceedings ---- 189

Woman's Auxiliary ---- 191

News Items and Personals ---- 193

Radio Program ---- 193

Births, Engagements, Marriages ---- 193

Deaths ---- 194

Society Records ---- 194

Medical Economics ---- 195

American Medical Association in Special Session Reaffirms Position Against Compulsory Sickness Insurance ---- 197

Legislative Proposal to Investigate Costs of Medical Care Introduced. Over 600 Measures Pending ---- 199

Books Received for Review ---- 210

Book Reviews ---- 212

Exchange Advertisements ---- 215

[Entered as second class matter, June 30th, 1903, at the Post Office at Milwaukee, Wis., under Act of Congress March 3rd, 1879. Transferred to Madison, Aug. 1st, 1929.]
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Cardiac Pain; The Differentiation of Genuine Cardiac Pain from Conditions Simulating It*

By FRANCIS D. MURPHY, M. D.
Milwaukee

THE problem of heart pain was selected for discussion, not for the reason that there is anything new to add to it, and not because I believe that what has been said can be improved upon. There are few disorders more difficult to diagnose, and rarely any that cause the patient greater disturbance or the physician more anxiety than pain in the heart area. In one patient such pain may indicate a serious heart condition which may cause an early, sudden, and painful death. In another a more agonizing pain in the same region may mean little more than an emotional upset. It is a subject that has become increasingly interesting during the past fifteen years, a period which marks the transition of the old and inaccurate diagnosis of acute indigestion to the more modern and scientific one, coronary occlusion. During this period the steady advance in our knowledge of diseases of the coronary system has led to a better understanding of heart diseases, especially those occurring in later life, and has aroused greater interest in the proper analysis of painful conditions simulating them.

The correct interpretation of precordial pain is a subject which has been, and probably will continue to be, one of fascination for clinicians, for, unlike many other disorders, the symptom complex of precordial pain must be unravelled to a great extent by the unaided clinical senses. In times like the present when every student in medical school is shown impressive examples of how the pain of coronary disease may be mistaken for an intra-abdominal lesion, it may be worth while to emphasize the fact that intra-abdominal lesions frequently are being treated as cardiac disorders.

What Osler[1] said 35 years ago applies as well now as then: "One must be a professional Ulysses in craft and wisdom not sometimes to err in estimating the nature of an attack of severe heart pain."

Immediately following Heberden's original description[2] the term angina pectoris was used to designate a clearly defined clinical picture. But after Heberden's generation passed away, writers began to speculate as to the cause, elaborate on the details of the symptoms, and propose new classifications which brought confusion and chaos into a subject that was fairly clear and definite. As a result almost every pain around the heart was called angina pectoris or false angina and the distinctions between the two were vague. Within recent years, through the efforts of many writers, coronary disease and its two major syndromes of angina pectoris and coronary thrombosis has been clearly defined. At the same time there has been a better understanding of the diseases which cause real heart distress and those that bear a resemblance to it. Osler[3] brought out the fact that angina pectoris was caused by narrowing of the coronaries due to arteriosclerosis in most instances, and in a paragraph outlined a case of coronary thrombosis. It was Herrick's[4] article, however, that initiated a period of concentrated clinical and laboratory research work on the subject of coronary disorders and pain resulting in a clearcut separation of angina pectoris, coronary thrombosis and the conditions simulating them. The chief aspects, both clinical and morphological, of coronary disease have been so universally

* Read before 93rd Anniversary Meeting, State Medical Society, Green Bay, September 1934.

and fully discussed in the past by many writers, that there is no point in going over the subject here except to distinguish the pain of coronary disease from other painful conditions often confused with it.

There are many disorders in which pain may develop in the cardiac area, and yet have nothing to do with the heart or the coronary blood flow. Although the differentiation of the typical cases is easy, many cases are atypical, so that mistakes are common and decisions are uncertain. For the purpose of differential diagnosis it is necessary to have in mind a classification of pain in the heart area that will show as fully as possible, in a clinical way, the correlation between pain generated in the heart and that which occurs in the heart region but has nothing to do with the heart. Mindful of the fact that no classification is entirely satisfactory, I have found the following arrangement to be helpful:

A. Coronary disease including angina pectoris and coronary thrombosis.
B. Precordial pain caused by heart disease but distinct from coronary diseases. There are two subdivisions in this group:
   1. Pain in organic heart disease as seen in mitral stenosis, aortic regurgitation and in left ventricular failure; and
   2. The precordial pain of the functional type, as seen in paroxysmal tachycardia, neurocirculatory asthenia, and in neurotic individuals.
C. Pain from diseases outside the heart simulating heart pain, as gall stones, peptic ulcer, pancreatitis, pleurisy, aneurysm, etc.

Coronary disease may be held responsible for two of the main painful syndromes of the heart. The first is angina pectoris which is produced by a narrowing of the coronary artery leading to a temporary coronary insufficiency; the second is coronary thrombosis followed by infarction of the cardiac wall. Although these two syndromes are both due to coronary disease they differ from one another mainly in degree of involvement of the coronary arteries, in intensity and duration of the attack. It is well recognized that angina pectoris is a condition associated for some time with an undamaged heart muscle and coronary thrombosis is followed by an injury of the cardiac muscle. In the first instance the patient makes adjustments in his activity to forestall the painful attacks but continues to be ambulatory, for the disorder frequently lasts for years. This is in sharp contrast to coronary occlusion which requires laying aside of all duties and going to bed for a period of months. Notwithstanding the fact that most observers believe angina to be produced by coronary insufficiency, there are cases of sudden death from angina pectoris where no coronary lesion is found at autopsy. The pain is the symptom around which the diseases of the coronary arteries revolve. As McKenzie[5] says, pain arises in muscle made to work while the blood supply is deficient. The prevailing opinion is that coronary narrowing, due most often to arteriosclerosis of the arteries, is the chief cause of angina pectoris. Yet there are dissenters who believe that angina may be due to conditions outside the coronary circulation. McCrae[6] and Brooks[7] particularly see other factors such as disturbances of the oesophagus and stomach as causes of angina pectoris. Carey Coombs[8] thinks that angina pectoris is produced by those types of disease which cause failure in delivering the proper amount of blood to the heart muscle; he mentions coronary occlusion, aortic regurgitation, lesions of the aorta and diseases of the blood itself. Of all chest pains, genuine angina pectoris is the one associated with the most clear-cut clinical picture. The location of the pain, its duration, and the sequence of events attending it are almost too characteristic to be missed; yet it is mistaken especially in those cases where the history is not clear.

ANGINA PECTORIS

Laying aside for the time many of the finer details, the exceptions to the rule, and the rare cases, the main feature which is pain will be briefly considered. Pain is the outstanding symptom and its location, dura-

tion, and area of reference, are its chief characteristics. The attack usually occurs in men who have passed the age of 40. The first attack comes on in one who has always considered himself to be physically in good condition. It sets in during some physical exercise, a period of emotional strain and occasionally following a large meal. The suddenness of the pain, its peculiar piercing quality and its persistence for a few minutes, causes the victim to stop immediately. The paroxysm leaves in a minute or two only to return later on when the same exercise or emotional strain is repeated. Later on the paroxsyms come with more and more regularity and last longer on each occasion, until the individual is greatly restricted in his activity and lives in dread of the approaching attacks. The pain is practically never precordial. It is not one which develops anywhere around the heart, but definitely beneath the sternum, usually beneath the upper, but sometimes under the lower portion of the sternum. Of great significance is the fact that this pain is relieved by nitrites, while pains not of the coronary type are not relieved but often aggravated by them. Following the attack the patient usually feels well, and his only complaint is his fear that the attack will return.

CORONARY OCCLUSION

Within recent years our concept of coronary thrombosis has been definitely clarified. Although Herrick[4] in 1912 set it aside as a distinct clinical and pathological entity, for years following coronary thrombosis remained couched in the literature under the term angina pectoris. There is no one mark of identification which singles coronary thrombosis from other diseases simulating it, as pain does in angina pectoris, but there is an aggregation of symptoms which leads to its recognition. Seeing this assemblage of symptoms over and over again leads to the detection of coronary thrombosis as one learns to recognize a person by having seen his face before. The pain bears a strong resemblance to that of angina pectoris; its location, the area of radiation and the response to nitrites are similar, but there is a difference in the mode of onset, duration of attack, and, especially in thrombosis, the presence of shock and collapse. The chief difficulty in the diagnosis of coronary thrombosis is that the clinical picture is made up of three separate events which are the sequelae of coronary disease. Hamman[9] has outlined these events quite clearly. Briefly stated, there are symptoms caused by the plugging of the coronary artery, those due to myocardial failure and, finally, those due to infarct of the cardiac muscle.

The fully developed clinical picture may not be present in every case. Sometimes one syndrome or the other dominates the clinical aspect completely. The coronary may be occluded and the process may come on so slowly that the heart adjusts itself to a reduced blood flow and anastomotic channels may come to the rescue of the failing coronary circulation. The result is the heart carries its load fairly successfully for some time, and heart failure is deferred until a later date. Fever, leucocytosis, and embolism develop after necrosis of the heart muscles has occurred.

The pain of coronary thrombosis may be localized in the sternal area as is that of angina pectoris. Often, however, the distress is noted only in the epigastrium, and there is a sense of fullness with relief from belching with the impression that gall stones are present. Many times there is a sense of tightness across the chest either with or without pain. This distress may occur following exercise, emotional strain, or it may come on when the patient is asleep. After a heavy meal a sense of fullness and distress may develop in the epigastrium, and, when sudden death occurs during one of these episodes, the diagnosis often made formerly was acute indigestion. In Chart I some of the chief features of angina pectoris and coronary thrombosis are tabulated:

CHART I

FEATURES OF ANGINA AND CORONARY THROMBOSIS

	Angina Pectoris	Coronary Thrombosis
1. Age	Over 40	Over 40
2. Sex	Male	Male
3. Cause of attack of pain	Effort, emotion	At rest
4. Onset	Sudden sternal pain	Sudden sternal pain

	Angina Pectoris	Coronary Thrombosis
5. Location of pain.	sternal	sternal or precordial
6. Duration of pain	minutes	hours
7. Condition between attacks	no distress	heart trouble
8. Shock	absent	present
9. Blood pressure	raised	lowered
10. Heart sounds	unchanged	gallop rhythm—irregular
11. Dyspnoea	absent	present
12. Cyanosis	absent	present
13. Congestion	absent	present
14. Fever and leucocytosis	absent	present
15. Electrocardiogram	changes often absent	typical changes present

GROUP 2

The second group of diseases causing precordial pain embraces those disorders associated with cardiac disease which are distinct from coronary occlusion and angina pectoris. Precordial pain, or pain over the apex of the heart, may be caused by organic heart diseases such as mitral stenosis, aortic regurgitation, and hypertensive heart disease. The pain in these cases is described as a dull ache, a sense of heaviness over the heart, and is associated with dyspnoea. Little difficulty is encountered in the proper interpretation of such pain, because the other signs of heart disease help to identify it. But there is another type of cardiac pain included in group 2 which is much more difficult to analyze, and is not uncommon. A large number of patients have pain over the heart associated with other signs of cardiovascular disorders such as palpitation, dyspnoea, weakness, dizziness, and headache, yet there are no definite morphological lesions in the heart or great vessels to account for the symptoms. Examples of such disorders are neurocirculatory asthenia, and paroxysmal tachycardia. In neurotic individuals a sense of discomfort and pain are frequently complained of, and occasionally it is hard to be sure that the patient is free from genuine angina pectoris. The functional type usually occurs in women under 40 years of age. The pain is felt over the left chest or over the apex area of the heart. Such pain lasts for hours, and is described as very severe and almost unbearable; yet the patient's color remains normal, there is no circulatory collapse, and the angor animi of genuine angina is missing. Shortness of breath is complained of, and on questioning it is discovered that dyspnoea does not occur, but there is a sighing, or deep breathing, in an effort to fill up the lungs which seem incapable of full expansion. Other stigmata of neurosis may occur, such as extreme exhaustion and inability to overcome the slightest obstacle in the day's routine. One encounters this disorder frequently in people of the emotionally unstable type. The attack is precipitated in some by an argument at home, and in others by a sad experience as death in the family. The attack is seldom caused by effort as is the case with angina pectoris, but is often associated with fatigue. The patients are chronically tired. When they describe the attack the diagnosis usually is clinched at once. A strong tendency toward exaggeration is exhibited, and they seem to wish to make this history sound as dreadful as possible. Placing the hand over the chest in the region where they believe the heart is, they launch on a detailed description of the pain. A throbbing, sharp pain is complained of which lasted for hours, and was associated with great weakness, sweating, flashes, fear, and fainting. One cannot help but feel that if such suffering really came from the heart that the organ would be completely wrecked. But on examination one finds the heart astonishingly sound. A careful history often reveals that these patients have been worrying about their hearts for a long time. A definite assurance that the heart is normal, relieves them considerably. It is important here to emphasize that if one is to relieve the patient of her burden a clear-cut diagnosis must be made, free from uncertainty and indecision. When the doctor has the same fear that the patient feels, that is, a fear that the heart may be badly damaged, then the diagnosis fails to carry force, and the patient leaves as sick and confused as she came. One of the chief points of differentiation lies in the fact that, between attacks of genuine angina pectoris, the patient is very happy to feel so well and is thankful for relief from pain, while in the neurotic group the patient never feels well, and usually is in a bad

state of nervous exhaustion even between attacks. Following the use of amyl nitrite or nitro-glycerin these nervous people are worse, and there is a sharp contrast to the relief obtained from nitrites by patients with genuine angina.

GROUP 3

In group 3 is included a variety of diseases that occasionally bear a superficial likeness to genuine heart pain, but which have no direct relation to the heart. Gall stones, peptic ulcer, cardiospasm, and pancreatitis are known to simulate heart pain. Primary carcinoma of the lung, interstitial emphysema and aneurysm, at times, cause confusion in diagnosis. Frequently pains in the chest may be caused by tenderness in the joints, muscles and tendons of the thoracic cage. In this group of diseases the pain and the associated events lack the characteristic pattern of coronary disease, and the patients are not apt to be of the neurotic type. Precordial pain may be present but the duration, intensity and sequelae are different from that of the other two groups. The attending features frequently suggest the correct diagnosis, and x-ray examination, electrocardiography or some specific test usually clinches it.

DIFFERENTIATION OF ABDOMINAL LESIONS FROM CORONARY OCCLUSION

While it is well known that pain of coronary disease is frequently referred to the abdomen, it is less well recognized that the pain of acute lesions in the abdomen at times simulates coronary disease. There is no class of cases which may cause more difficulty in diagnosis, greater anxiety, or in which an error is more damaging than those in which there is doubt whether the lesion is in the heart, or in the abdomen. When a patient is seized with a sudden, severe pain in the abdomen, and develops some evidence of collapse, the differential diagnosis must be made immediately between a lesion above the diaphragm from one below. Much depends upon the opinion given, and the time for making the diagnosis is limited. A decision to operate will be followed by a fatal outcome if a coronary thrombosis is present, and yet a wrong decision to delay operation likewise may cost the patient's life. As a rule, the first and earliest examination is most reliable, for at this time the facts are clearest in the patient's mind and the events have not become clouded by repeated questioning and re-examinations.

There are three surgical conditions of the upper abdomen which frequently simulate coronary disease. They are perforated peptic ulcers, acute hemorrhagic pancreatitis and gall bladder disease. Certain general diagnostic features are important, but they are not decisive in the differentiation. Since pain is the outstanding feature, a more detailed analysis will be given. In coronary disease the pain may be confined to the abdomen or to the chest. Radiation of pain to the arms is characteristic of coronary disease. Pain in coronary disease is associated with shock of a greater degree than that found in most other diseases. The opinion prevails that pancreatitis produces great shock, but the intensity of shock and collapse does not approach that of coronary thrombosis. In coronary thrombosis, the rigidity of the abdominal wall is usually lacking, while it is usually present with intra-abdominal lesions. Localized tenderness on pressure may be elicited over the gall bladder area in gall stone disease, over the epigastrium in ulcer and pancreatitis; but there is no definite point of tenderness in coronary disease—rather a diffuse, poorly defined tenderness. In acute abdominal emergencies pain, pallor and rigidity of the abdomen are the chief signs, while in coronary thrombosis they are pain, cyanosis and collapse. The pain of coronary disease is more constant and associated with constriction of the chest, a feature not seen in diseases below the diaphragm. Although shock may be seen with abdominal emergencies, it is usually either absent or mild, while in coronary thrombosis it is constant and severe. Finally, a cardinal point in differentiation consists in the presence of left ventricular failure in coronary disease. Periodic spells of dyspnoea develop which cause the patient to sit up for air; he is unable to lie horizontally with comfort, and must be propped up

in bed in order to breathe with ease. Even then the dyspnoeic attacks cause great distress. Of utmost importance in this diagnosis is the presence of pulmonary edema, a sequel of left ventricular failure. This edema may be so severe that the patient coughs up blood-tinged froth, or so mild that the evidence is obtained only by careful auscultation of the bases of the lungs. In early stages listening at the bases of the lungs reveals definite evidence of pulmonary congestion. A sharp contrast to this picture is presented by the patient with an abdominal lesion. Here the patient may breathe rapidly, but he is not cyanosed, and is content to lie flat in bed undisturbed by dyspnoea. Auscultation uncovers no pulmonary edema and no cardiac irregularities.

SUMMARY

1. In this paper I have not tried to present anything new, but have attempted only to refresh your memories and to emphasize some of the things you may have forgotten.
2. A classification is given of the disorders causing genuine heart pain and the disease which may bear a resemblance to them.
3. A brief summary is presented of angina pectoris, coronary thrombosis, the heart pain of the neurotic patient, and the painful diseases of the abdomen at times simulating cardiac pain.
4. Emphasis is laid upon the fact that coronary disease is usually adequately recognized, but that more often than we think, abdominal disorders are treated for long periods as coronary occlusion.

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Spontaneous Subarachnoid Hemorrhage; Report of 12 Cases*

By MABEL G. MASTEN, M. D.
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ALTHOUGH spontaneous subarachnoid hemorrhage was described in 1886 by Bramwell,[1] its symptomatology has been recognized only in recent years and differentiated from other forms of spontaneous intracranial hemorrhage. Since the outcome is much more favorable in this form than in other types of intracranial vascular catastrophe, it is important that the syndrome be recognized and that appropriate treatment be instituted.

The term spontaneous subarachnoid hemorrhage has been defined by Strauss, Globus and Ginsburg[2] as a massive extravasation of blood into the subarachnoid space caused by a spontaneous rupture of a blood vessel. Other forms of subarachnoid bleeding such as traumatic laceration of the meninges, bleeding into neoplasms with subsequent rupture to the surface, and diapedesis in the blood dyscrasias are excluded. Objection is voiced to the use of the term massive for it suggests a fatal outcome, and in the 12 cases to be reported, 10 survived one or more hemorrhage. In many cases the opening in the sac is small and the blood escapes slowly and is disseminated throughout the spinal fluid instead of suddenly filling the basal cis-

* From the Department of Neuropsychiatry, University of Wis.

terns as it would if the opening were large. It is in the latter situation that death rapidly ensues due to compression of the medullary centers.

The etiology is largely speculative, but it seems logical to assume that a defective vessel wall exists in every case. The common occurrence of such hemorrhages in children and young adults places congenital defects high in the list of etiological factors. Aneurysm on the basis of congenital defect in the blood-vessel wall is probably the outstanding cause of these hemorrhages. The nature and frequency of such defects is well developed by Forbus[3] who by diligent search found 12 aneurysms in 70 routine necropsies. In a study of brains, of embryos and one stillborn, he found frequent defects in the muscularis coat at the bifurcations in the Circle of Willis, thought due to failure of fusion of two separate cell groups, one for the parent vessel and one for the daughter. It was further proved that the pressure within the blood-vessel is greatest at the point of bifurcation and that dilatation thus ensues followed by weakening in the intima and elastic layers. Careful microscopic study of the aneurysms found in the 70 cases disclosed an absence of the muscularis in the walls of these sacs. Recently Tuthill[4] reporting 6 cases of cerebral aneurysm, declared Forbus' theory to be based on misinterpretation of embedding artefacts. His refutation is not conclusive, as it leaves unexplained the aneurysms found in children and young adults where arteriosclerosis or other disease of vessels is absent.

Other considerations must include aneurysm due to acquired factors. Mycotic emboli from diseased valves or deposition of bacteria in any infectious disease may condition a vessel for rupture, sometimes many years after the acute infection. It goes without saying that arteriosclerosis may be the determining cause in those persons of older years, especially if accompanied by hypertension. That syphilis is not a common cause is explained by the nature of the process in the vessel wall. As is well known, when the small vessels such as occur within the central nervous system become involved in a luetic inflammation, endarteritis and encroachment on the lumen occurs. Until Turnbull's[5] study of the relation of syphilis to alteration in the arterial structure (1915), this disease was considered as a common cause of aneurysm of the cerebral vessels. Nevertheless, cases have been reported, few in number, where at postmortem there was indubitable evidence of luetic aneurysm. Symonds[6] in a series of 127 cases of subarachnoid hemorrhage reported 10 due to lues, of which 5 were confirmed at autopsy. Sands[7] reported one autopsied case of this etiologic origin. In general, it may be said that syphilis should be regarded as an uncommon cause, considering the frequency of syphilis and the fact that it is primarily a vascular disease. The question of toxemia as a cause of subarachnoid hemorrhage has not been raised in the literature covered. Although no absolute criterion of toxemia of pregnancy could be adduced in Case 5, the fact that such hemorrhage occurred in the eighth month of two successive pregnancies with recovery from grave neurologic symptoms, following induced labor, is too suggestive to overlook toxemia as a cause. A. G. King's[8] report of "Eclampsia without convulsions ending in cerebral hemorrhage" lends emphasis to this possibility. In Case 12, subarachnoid bleeding complicated a grave toxemia of pregnancy.

Bassoe[9] in his paper on migraine mentions a number of authors who have reported spontaneous subarachnoid hemorrhage in migrainous headache. Bassoe suggests that the headache may have been due to aneurysm, and was, therefore, not true migraine. In Case 8, the history indicated that the daughter, as well as the patient, had migraine.

In summing up the etiology, aneurysm seems to be, without doubt, the commonest cause of subarachnoid hemorrhage in the autopsied cases.

The failure to report intracranial aneurysms oftener is said by Gull[10] in 1859 to be due to their not being looked for, or by their being overlooked. Quoting Gull for further emphasis, "When young persons die with symptoms of ingravescent apoplexy, and after death a large effusion of blood is found, especially if it be over the surface of the

brain in the meshes of the pia mater, the presence of aneurysm is probable".

The symptomatology can be best described by recital of personal experience. In the case reports and outline to follow, the reader will be impressed with the youth of the patients, the fact that in the majority of the cases, recovery was complete, although 5 had a recurrence of the hemorrhage, and that in 4 cases at least, the hemorrhage could be said to have been massive. Death in 2 cases was not due to the hemorrhage, although in one it was a complication of a grave heart condition in which death was due to cardiac failure. Only two died as a result of the hemorrhage. Only two cases are being reported in detail: the first illustrates a common and more or less typical case but not a severe hemorrhage; the second depicts a massive hemorrhage with grave and characteristic symptoms. In the chart to follow will be found an outline of the twelve cases.

CASE REPORTS

Case #1. W. J., age 16, came home January 15, 1931, feeling drowsy and ill. On getting up next morning, he staggered and vomited. This was followed by headache, stiff neck, photophobia, and drowsiness. He continued to vomit at intervals, and developed weakness in his right leg. It was recalled that a month before he had vomited after breakfast, but had attended school. During the football season, he had received two kicks to the head, one resulting in swelling and discoloration about the eye.

He was admitted to the hospital on the eleventh day of his illness appearing very ill and drowsy. Neurological examination revealed nystagmus, dilated pupils, choking of discs, more marked on the left, paralysis of the right internal rectus, weakness of the lower right facial muscles, weakness of the right side of the tongue, absent kneejerks, left Babinski, ataxia of the left arm and leg, and generalized hypotonia. A lumbar puncture revealed xanthochromic fluid under pressure of 28 mgms. Mercury, gold sol curve of 1223210000, and a spinal fluid sugar of 54 (blood sugar at the same time was 100). Treatment consisted of daily lumbar punctures. He was discharged February 21, 1931. He is now a junior in the engineering school, weighs 180 pounds, and has no residuals of his illness.

Case #4. L. C., age 28, a physician, was admitted to the student infirmary at 12:45 A. M. on April 27, 1932. He had arrived home about 10:00 P. M. after spending the evening examining students. After making preparations for retiring, he was found by his wife sitting on the bed with his head clutched in his hands in an expression of intense pain. He was unable to speak and vomited profusely. On his arrival, his chief found him to be clear mentally and able to cooperate for examination. He indicated the left side of his head for the site of his pains. His pulse was 80, blood pressure 128/94, his right arm and leg were weak. His tongue protruded to the right, his right lower face was less active than the left. Examination on entrance to the hospital two hours later revealed grossly bloody spinal fluid under 40 cm. H_2O pressure. Compression symptoms gradually increased. At 2:20 A. M. he was in a deep coma with stertorous Cheyne–Stokes breathing, pulse had dropped from 110 to 60 and blood pressure rose to 170/90. At 2:40 pulse became weak, blood pressure 156/102 and death seemed imminent. A cisternal puncture was done with a hope of relieving compression of the brain stem. What appeared to be pure blood was removed and before the needle was withdrawn, respiration had become normal and radial pulse increased in volume. Upon withdrawal of the needle, the blood pressure was 126/86; pulse 62. From this point on his pulse and blood pressure remained stable. He was still in deep coma the following morning, but during the performance of a combined cisternal and spinal puncture, he opened his eyes and moved about. The cisternal fluid concentration of blood remained the same as the previous night, the specimen coagulating. A definite right hemiparesis, weakness of the right side of the face and the right side of the tongue, the left pupil larger than the right, and a stiff neck were the findings.

Headache, vomiting and stiff neck persisted throughout the month of May. Incontinence did not occur after May 12. He began to recover from his aphasia by speaking several words on April 29. The right weakness slowly improved. The spinal fluid was clear xanthochromic on May 14. On May 16 marked psychic improvement had occurred and he discussed his future. Until June 1 headache, dizziness and vomiting occurred and seemed to depend upon disturbed cerebrohydrodynamics. Spinal punctures or dehydration always temporarily improved these symptoms. Fever, not more than 101, and a moderate leucocytosis occurred for the first 9 days.

Spinal punctures were made daily until there was no longer macroscopic blood, and thereafter when headache and vomiting suggested interference with cerebrospinal fluid circulation. Dehydrating measures and hypnotics for relief of pain was the only other therapy. He was discharged from the hospital on June 24 completely recovered except for a Kernig on the right, a slight limp on the right, less activity in the right arm, but no difference in strength on the two sides. He returned to his work in the Student Health Department on August 1, 1932, completely recovered.

Scarlet fever in childhood was complicated by endocarditis. He now has a well compensated mitral regurgitation.

Case Age Sex	Onset	Pain or Headache	Emesis	State of Consciousness	Significant Findings	Signs of leaking or recurrence of hemorrhage	Recovery	Etiological Factors
# 1 16 M	On arising felt ill. Staggered and vnmited	Headache nnt severe	Recurred for 15 days	Drowsiness fnr 15 days	Photnphnhia, nystagmus, dilated pupils, choked discs, impairment of rt. 6th, 7th & 12th N., ataxia left side, absent reflexes, left Babinski	Suggestive signs of leaking.	Complete	Trauma to head on twn occasions two mnnths before hemorrhage
# 2 41 F	On stooping felt as if something had broken in her head.	Initially pain in top nf head and radiation into sides nf neck.	Initial emesis only.	Coma fnr two days.	Choked discs, retinal hemnrrhages; no focal signs.		Complete	
# 3 45 M	While cranking his car became faint and dizzy	Severe headaches.	Initial vomiting	Unconscious a few moments, restlessness and confusion	Photophnhia, yawning, focal signs equivocal.	Recurrence of hemorrhage 15 days later—onset with 2 convulsinns.	Complete	
# 4 28 M	Sudden	Severe pain left side of head	Profuse	Coma 12 hours with grave signs of medullary cnmpressinn.	Right hemiparesis, aphasia, right facial—mental confusion and incontinence for 20 days		Complete	Scarlet fever and endocarditis in childhood
# 5 22 F	Sudden in 8th month nf pregnancy.	Aching in neck and upper back	Profuse	Unconscious 6 days followed by 6 weeks delirium or confusion.	Chnked discs, retinal hemorrhages, variable neurnlngical signs: several cranial nerves and both sides nf body; hyperpyrexia, tachycardia.	Secnnd hemorrhage 3 years after first—again in late pregnancy.	Recovered from both hemnrrhages; Residual weakness left leg	Pregnancy. No aneurysm found on postmnrtem.
# 6 21 M	While stooping felt something snap in his head.	Pain behind right eye followed by severe headachc.	For 3 days.	Coma 18 hours followed by delirium.	Right pupil larger than left, edema of discs, increased reflexes Babinski, ataxia and hypotonia of legs.	Second hemorrhage 3 years after first.	Complete	Cnngenital aneurysm?
# 7 38 F	Sudden	Pain in right eyeball requiring morphine	None	No loss of consciousness	Complete right 3rd N. paralysis, choking of disc, cardiac decompensation, hypertension. extra cerebral aneurysm		Died—due to cardiac decompensatinn.	Infection in leg gave rise to endocarditis and mycotic aneurysm.
# 8 41 F	With a sudden "snap" head.	Pain in occipital and frontal regions.	Vomited violently	Unconscious for 3 hours.	Choked discs, retinal hemorrhages, reduced reflexes.	Second hemorrhage 6 weeks after first	Complete	Patient and daughter have migraine
# 9 18	Sudden while patient was in stupor.	Headaches previous to hemnrrhage		Cnma	Subacute bacterial endocarditis, ophthalmoplegia, chnked discs, weakness right arm and Babinski.	Leaking preceded fatal hemnrrhage	Expired 2 hours after hemorrhage	Mycotic aneurysm basilar artery (postmnrtem)
#10 63 M	Sudden loss of cnnsciousness	Headache at onset and returning later	At onset for few days	Short loss of consciousness followed by restlessness and cnnfusinn.	Dysarthria right ptosis left facial, ataxia, increased reflexes.		Discharged	Alcohnlism and arteriosclerosis.
#11 39 M	Sudden	Severe	At onset	Coma eight hours.	Right hemiparesis, left ptosis, left facial weakness, bilateral Babinski.	Signs of leaking many years—3 hemorrhages	Died after 3rd hemorrhage	Multiple cnng. aneurysms (Postmortem)
#12 31 F	Sudden in 8th mnnth of pregnancy.	Headaches during latter part nf pregnancy	Recurring	Toxemia, convulsinns, coma psychosis	Nn findings, other than psychosis		Complete fnllowing Caesarean section.	Toxemia of pregnancy

DIAGNOSIS OF ANEURYSM

Since aneurysm must be the forerunner of most, if not all, cases of subarachnoid hemorrhage, the question of the diagnosis of aneurysm will be discussed. It is repeatedly stated in the literature that most of these hemorrhages are unheralded. This belief is due probably to the over-shadowing of past symptoms by the catastrophic event of the larger hemorrhage, and by the fact that the symptoms of "leaking" are not given serious consideration. Symonds[11] firmly believes that the diagnosis of cerebral aneurysms can be made in life. He distinguishes three groups of clinical signs: 1. those due to mechanical pressure upon the surrounding structures (neighborhood symptoms); 2. those due to the disease which was the cause of aneurysm; 3. those due to the presence of the aneurysm itself (leaking). Leaking merely describes a less extensive hemorrhage, and is due to a tiny rent in

the wall of the sac with oozing of blood followed by healing of the opening. Sooner or later, a large tear occurs and apoplexy is the result. The symptoms of "leak" may recur many times during the course of many years, manifested by attacks of headache, vomiting, pain in back of the neck and dizziness. Often the warning signs of leaking are followed in a much shorter time by the hemorrhage. Cases #1, #6, #7 and #11 gave history of symptoms indicative of leaking. Sometimes the early signs of leaking suggest the location of the aneurysm. In the anterior group of vessels comprising the Circle of Willis (internal carotids, middle cerebrals, anterior cerebrals, anterior communication) leaking produces pain in the ophthalmic branch of the Vth nerve and weakness or paralysis of the IIIrd, IVth and VIth nerves, and exophthalmos. When the leaking occurs in the posterior group (post communicating, posterior cerebrals, basilar and vertebrals) paralysis of the IIIrd nerve (posterior communicating) and pressure symptoms result. Basilar aneurysm may cause hemiplegia, paraplegia, dysarthria, dysphagia and mild cerebellar symptoms. According to Sands[12] aneurysms of the anterior cerebral rarely give signs of their presence. Hemorrhage at the juncture of the anterior cerebral and anterior communicating arteries is apt to invade the frontal lobe and may cause mental impairment, hemiparesis and dysphasia if on the left side. In a series of 555 cases, the percentages giving signs of the presence of aneurysm are listed according to their location. Cavernous portion of the internal carotid aneurysms gave symptoms in 69% of cases; basilar—50%; posterior communicating—47%; posterior cerebral—41%; intracranial portion of internal carotid — 31%; middle cerebral—22%. Cases #7 and #9 developed focal symptoms suggesting the diagnosis of aneurysm, the former in the anterior group and the latter in the posterior.

Youth and the absence of infectious disease, especially endocarditis, indicates the aneurysm to be the result of a congenital defect in a vessel wall; while in the patients past middle life, arteriosclerosis will be the first consideration, although age does not rule out congenital origin. In the presence of bacterial endocarditis, an aneurysm secondary to a mycotic embolus will be the logical conclusion. Symonds' (ibid 11) three groups of clinical signs are nicely illustrated in Case #9, and led inevitably to the diagnosis of aneurysm of the Circle of Willis and subarachnoid hemorrhage. The symptoms produced by aneurysms at the base of the brain may suggest tumor or meningitis. If a spinal puncture reveals blood tinged or xanthochromic fluid, the case resolves itself in favor of hemorrhage.

In the absence of signs of leaking or focal symptoms due to pressure of the aneurysm, there is a very definite train of events that point obviously to a spontaneous subarachnoid hemorrhage. The onset is sudden, not infrequently with a sensation of something "snapping" in the head followed by agonizing pain in the occiput which soon spreads upward, finally becoming a generalized severe headache. Emesis takes place immediately; if the hemorrhage is large enough to fill the cisterns, consciousness is usually lost. Sometimes instead of coma, a state of confusion and agitation develops. A stiff neck appears in a few hours which may develop into a marked rigidity, due to irritation of the cervical nerves. If hemorrhage is large and the site is in or close to the Circle of Willis, compression of medullary centers produces an alarming change in the respiration, pulse and blood pressure. In the event death does not supervene, a stormy course may follow. Headache and stiff neck are often protracted; slow pulse, photophobia, nystagmus, choked discs with retinal hemorrhages, reduced reflexes (later may be increased), Babinski and dilated, unequal pupils are common findings. Convulsions, due to cortical irritation, hyperglycemia and glycosuria, due to stimulation of the tuber cinereum are less common symptoms. Focal symptoms of hemiplegia and aphasia may occur. The finding of blood intimately mixed in the spinal fluid under increased pressure concludes the syndrome and differentiates it from all other conditions of the central nervous system. A mild degree of fever and leucocytosis are present in the early stages, and a slight pleocytosis may appear later in the xanthochromic fluid. The relatively slight loss of consciousness in some

of the cases may be ascribed to the extent of the hemorrhage and rapid diffusion into the subarachnoid space preventing accumulation and clotting in the basal cisterns. Transient recoveries, or recoveries and relapses distinguish these cases from intracerebral bleeding. The appearance or history of pain and stiff neck in any case of cerebral apoplexy should lead to the differentiation of intracerebral and subarachnoid hemorrhage in favor of the latter. Hemorrhage in brain tumor which has ruptured into the subarachnoid space or ventricle, presents difficulty in differentiating from spontaneous subarachnoid hemorrhage although the history will usually be a deciding factor.

TREATMENT

Differentiation of subarachnoid from intracerebral bleeding is an important distinction to make for it determines the management of the case. The prognosis in these meningeal hemorrhages is favorable, the patients sometimes surviving several hemorrhages occurring years apart. The course may be short or long, depending on the amount of extravasated blood, the location of rupture and the treatment instituted. Lumbar puncture at the onset must be done merely to clinch the diagnosis, and in the hands of one experienced with cisternal punctures, this procedure is desirable, having the advantage of causing less rapid lowering of pressure in the subarachnoid space. On occasions the cisternal puncture may be a life saving measure, serving to remove the blood from the basal cistern allowing for greater diffusion and removing compression. In Case #4, it will be noted that at a time when death seemed imminent, this reasoning led to a cisternal puncture, followed by immediate restoration of normal respiration and blood pressure and a quickening of the bradycardia. A second cisternal puncture a few hours later resulted in restoration of consciousness, although the patient remained in a confused state for 20 days.

When everything points to cessation of bleeding, lumbar punctures should be done to remove the irritating products of the hemorrhage and to stimulate free effusion of blood preventing the organization of large clots. If there are symptoms of further leaking, the lumbar puncture should be withheld for twenty-four hours. Small amounts, 30–40 c.c. daily will serve the desired ends. The patient usually welcomes the puncture for the headache is relieved for a time. Air has been injected in three of these cases in the hope of adding further agitation to the spinal fluid circulation to prevent blocking in the basal cisterns. Failure to puncture delays recovery from the acute symptoms and results in intense suffering from headache and painful, stiff neck, and is more apt to result in residuals due to organized clots and formation of adhesions due to the aseptic meningitis. This attitude is in direct contrast to the conservative opinions expressed by many authors on the subject, who offer as explanation only the traditional fear that change in the spinal fluid pressure will increase bleeding. It is felt that if caution is exercised the first 24 hours, further bleeding is extremely unlikely, and that withholding cisternal or lumbar puncture during a stage of compression may result fatally. The following case is quoted because the author believes it illustrates the point made that failure to use the puncture therapeutically results in a prolonged illness until absorption has been complete. The case was not included in the series because a spinal tap was not made, but although the diagnosis was not confirmed, the case is quite classic and has helped develop the convictions concerning the necessity of punctures.

Mrs. W., age 58, while washing her hair, May 22, 1931, was aware of a sudden change coming over her. Her head "felt as if it would burst" and strength began to disappear from her legs, and then her arms. An agonizing pain appeared in the back of her head and then in both eyeballs. She vomited immediately and upon six other occasions during the night. Blood pressure taken by her physician was 140. Pulse was rapid and weak, then became slow. She did not lose consciousness or become paralyzed but was irrational on two occasions during the four days following. When seen in consultation four days later, it was learned that the pain (not a headache) had been continuous except for short interruptions due to sedative drugs. The pain had ceased in the left eyeball but persisted in the right. There was marked limitation of movements of the head, especially forward, intense photophobia, miotic pupils, horizontal nystagmus, limitation of upward movements of the eyeballs, deviation of the

tongue to the left, absent Achilles jerks, ataxia in the right leg, pulse 72, blood pressure 122/76. On May 30, eight days after the onset, the pain was still continuous, less severe and definitely right-sided. The temperature was 100, pulse 60–70, blood pressure 142/76. The right eyelid was puffy, face smoothed out on the right and the tongue still deviated to the left. The remainder of the findings were the same as on the first examination. By June 1, 1931, the neurological findings had disappeared but the pain persisted. Recovery was very slow, the stiff neck being protracted. Six months later she was still inactive due to stiffness of the neck and pain, attacks of dizziness and sense of insecurity. She seemed to develop some permanent changes in the right IInd and IIIrd cervical nerves, for she was seen on April 30, 1932, still complaining of pain in the neck and limitation of motion. Except for this, she is now well.

The author is convinced that had this patient had spinal punctures, recovery would have been prompt and complete as in the others.

In the presence of subarachnoid hemorrhage complicating hypertension, venesection should be done, removing 500 c.c. and repeating later if necessary. The question of fluid intake is important. During the early stages of a meningeal hemorrhage, fluids are withheld to combat cerebral edema. After a few days, they are increased to help wash out the blood, unless it seems that intracranial pressure is increased thereby, in which case, limitation is continued, and may be necessary for many months. Case #4 was much more comfortable on reduced fluid intake. Hypertonic glucose daily or oftener during the comatose or stuporous periods not only aids in dehydration but is a source of nourishment. Further therapy is largely symptomatic. Prolonged inactivity in bed is important to allow for complete healing of aneurysm. This period should be of at least two months' duration. Thereafter, the patient should be warned against indulging in prolonged severe physical activity or sudden exertion to prevent, if possible, another rupture.

SUMMARY

1. Twelve cases of spontaneous subarachnoid hemorrhage are presented. Death occurred as a result of this hemorrhage in two cases, #9 and #11. In 5 cases there have been more than one hemorrhage (Case #3, 13 days apart; Case #5, 3 years apart; Case #6, 3 years apart, Case #8, 70 days apart; Case #11 had 3 hemorrhages with an interval of 2½ years between first two and 3 weeks between second and third). Of the ten who recovered from the hemorrhage, all except two were completely restored to health. Case #5, had a residual weakness in her right leg, and postmortem disclosed scarring in the frontal cortex from the first hemorrhage. Case #10 recovered from the hemorrhage but not from the alcoholic dementia.

2. From a historical standpoint, it is logical to assume that an aneurysm is present in all these cases with the exception of Cases #5 and #12, which may have been the result of spontaneous rupture of a vessel due to toxemia of pregnancy. No aneurysm was found in Case #5, but it is sometimes necessary to make serial sections to find a small aneurysm. Gross examination revealed an intact Circle of Willis and rupture of a branch of the anterior cerebral artery appeared to have occurred on the inferior surface of the frontal lobe. Other etiological agents were bacterial endocarditis and mycotic aneurysm (Case #9), endocarditis and scarlet fever in childhood (Case #4), migraine (Case #8), although both mother's and daughter's symptoms may be due to aneurysm, arteriosclerosis and severe alcoholism (Case #10). Trauma possibly enters into Case #1.

3. The average age was 33; the youngest 18, the oldest 63; only one was older than 45.

4. Treatment is largely concerned with relief of acute compression, the dissemination of blood to prevent clots forming in the basal cisterns and the removal of the agent (blood) irritating to the meninges. To this end, punctures, preferably cisternal, are done in the first 24 hours and subsequently lumbar punctures as indicated by symptoms and spinal fluid findings. Bed rest is a most important aid to healing of the site of the hemorrhage.

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Drug Hypersensitivity As A Cause of Acute Primary Granulocytopenia

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THE term "acute primary granulocytopenia" is used to designate those clinical states in which profound granulocytopenia is the result of an acute failure of the bone marrow to produce granulocytes. This is the condition which has been variously called agranulocytosis, agranulocytic angina, malignant neutropenia, etc. It is to be sharply differentiated from two other states in which primary deficiency in granulopoietic function occurs in the bone marrow; namely (1) the chronic granulocytopenic states in which the granulocyte level in the circulating blood is constantly below 3000 per cubic millimeter, and (2) the cyclic or recurrent granulocytopenic states in which profound depression of granulocytes occurs at more or less regular intervals. These primary granulocytopenic states must also be clearly differentiated from the secondary granulocytopenias in which depression of bone marrow function is secondary to infection or disease in other organs. This latter group includes the leukopenias resulting from overwhelming infection as a part of other diseases of the blood forming tissues, and as a result of so-called "negative chemotaxis" in various infections.

In previous communications we have presented evidence to show that amidopyrine, either alone or in combination with other drugs, is an etiologic factor in many cases of acute primary granulocytopenia. In 19 of 20 cases which have come under our observation the onset of the acute disease was directly preceded by the use of amidopyrine in some form. Subsequent to our first report there have been reports of 71 additional cases in which amidopyrine appeared to be responsible for the onset of the disease. The rapid accumulation of evidence from widely scattered sources leaves little room for doubt of the frequent etiologic role played by amidopyrine. It is recognized that arsphenamine is capable of producing a similar bone marrow reaction in occasional instances, and cases of acute primary granulocytopenia have been reported following the use of other drugs such as gold salts, dinitrophenol, and phenacetin. There can no longer be any question but that certain drugs are capable of producing the clinical picture of acute primary granulocytopenia.

Two hypotheses have been advanced to explain the mechanism involved. In 1931 Kracke suggested that the disease resulted from the toxic action of drugs containing the benzene ring. Later Kracke and Parker advanced the hypothesis that the depression in granulocytes is the result of a direct toxic action on the bone marrow of some of the oxidation products of benzene (hydroquinone, catechol, orthoquinone and paraquinone). By the use of various oxidation products of benzene they were able to depress the leukocyte count of rabbits to as low as 1,000 cells per cubic millimeter. However, only an occasional animal was affected, and of the many thousands of persons taking drugs of the "benzamine group" only a few develop the disease. Kracke and Parker assume therefore as a part of their hypothesis that "in the clinical or experimental development of granulopenia, it is necessary to presuppose the existence of a previously weakened, damaged, or idiosyncratic bone marrow."

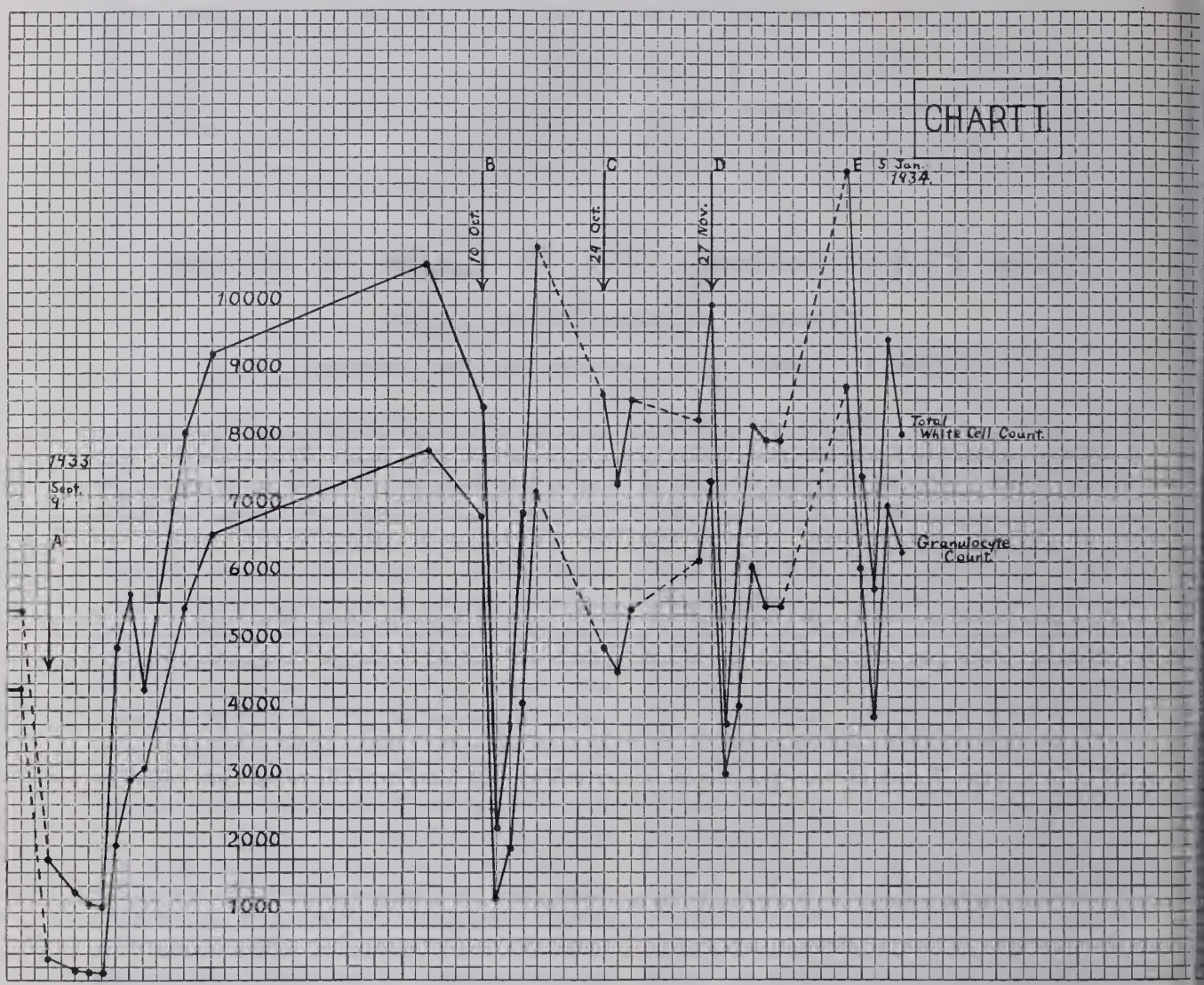

Chart 1. Total white blood cell and granulocyte counts (Case 14) showing onset of granulocytopenia (A) following therapeutic administration of amytal with amidopyrine (amytal compound). After recovery, acute recurrences followed administration of a single 10 grain capsule of amytal compound (B), and of a 5 grain tablet of amidopyrine alone (D), while administration of amytal alone (C) was followed by no significant change in either total or granulocyte counts. At E is shown a recurrence which followed application of a patch test of amidopyrine to the unbroken skin.

Pepper observed that several of the patients he had seen with agranulocytosis were allergic individuals and in 1930 suggested that the disease might be an allergic manifestation. In our first report we stated that it was our conception that the bone marrow and blood changes in many cases of acute primary granulocytopenia are the result of repeated administration of certain drugs to which the individual has developed hypersensitivity, and that the clinical manifestations result from the bacterial invasion of the tissues made possible by the continued granulocytopenia. In support of this allergic hypothesis we have been able to produce granulocytopenia at will on re-administration of amidopyrine to individuals who have had the acute disease following the use of this drug. Furthermore, by patch tests made with a 10% suspension of amidopyrine we have obtained positive skin reactions together with marked depression of the granulocyte count and associated clinical symptoms of a general reaction.

In Figure I the granulocyte response in one amidopyrine sensitive patient is shown

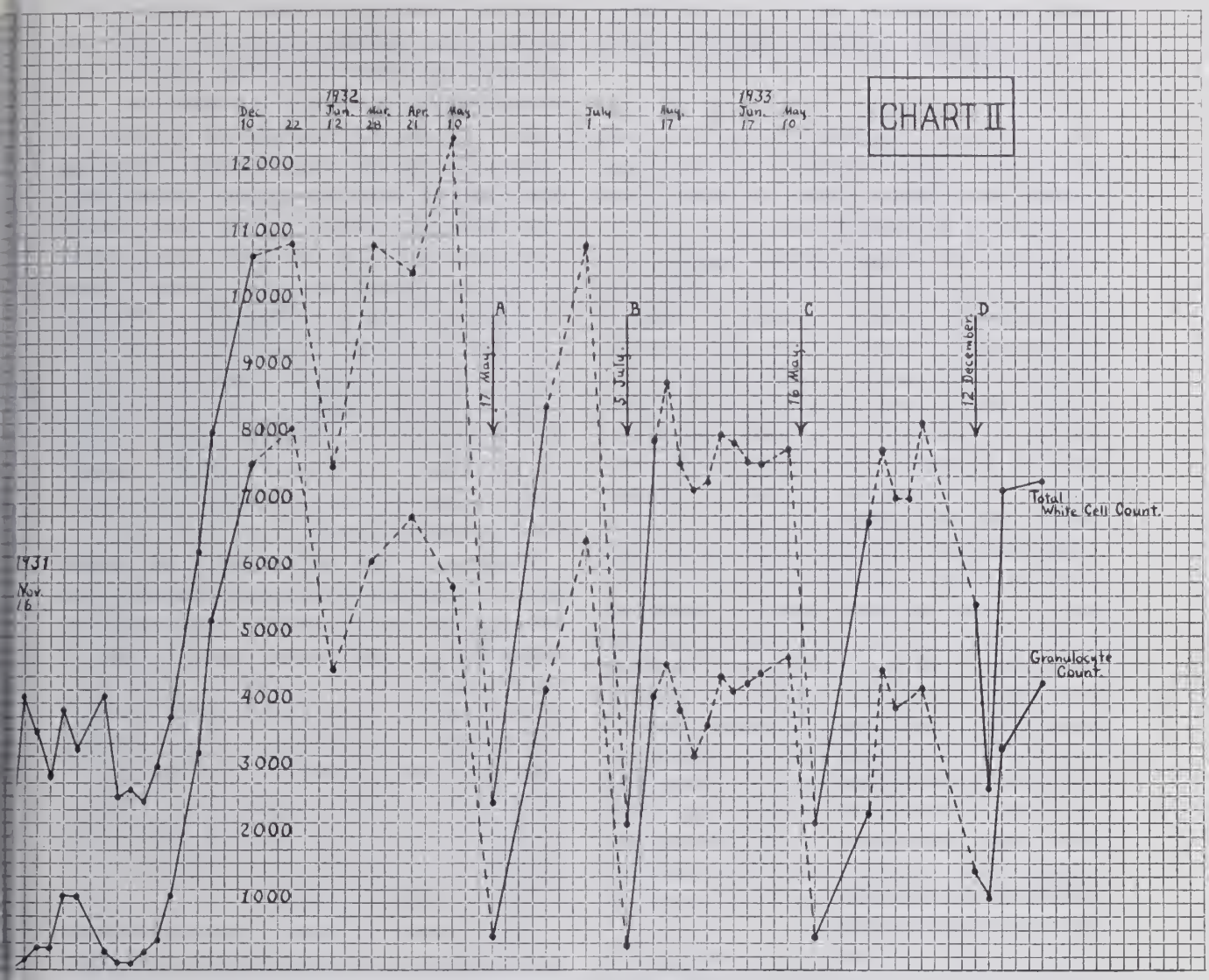

Chart 2. Total white blood cell and granulocyte counts (Case 1) showing period of acute granulocytopenia. On May 17th and on July 5th there were two sharp recurrences shown at A and B respectively. It was found that amidopyrine had been taken immediately prior to these recurrences. Ten months later a sharp recurrence followed administration of a single 5 grain tablet of amidopyrine (C). At D is shown a similar recurrence with associated clinical symptoms which followed application of a patch test of amidopyrine to the unbroken skin.

from the original acute illness. On May 17 and July 5 there were two sharp recurrences of granulocytopenia each of which was preceded by the taking of amidopyrine. After an interval of 10 months, during which time the count remained normal, a single 5 grain tablet of amidopyrine was taken and within 3 hours there was deep-seated bone ache, malaise and the temperature rose to 102. The granulocyte count rapidly fell to 250 and then gradually rose until within 6 days it had reached the normal level.

A few months later patch tests were made using a 10% suspension of amidopyrine, phenobarbital, aspirin and allonal applied to the unabraded skin. Twenty-four hours after application of the patches there was tiredness, aching of the bones, chilly sensations, and fever. These clinical symptoms were accompanied by a profound fall in granulocytes and 36 hours after the patches were applied the white count was 2,700. Subsequently, there was a gradual return to the normal level and complete disappearance of all clinical symptoms. During the acute stage a slight but definitely positive re-

action was present at the site of the allonal and amidopyrine patches while the others were negative.

In Figure 2 is shown a similar response to patch testing in a patient who had developed acute primary granulocytopenia while under hospital observation. Both of these cases are reported in detail elsewhere.

The amount of amidopyrine used by the patients observed by us has been well within the normal limits of therapeutic dosage. Recurrences of profound granulocytopenia have been induced by administration of a single 5 grain tablet of amidopyrine and indeed by the exceedingly minute amount that could be absorbed from a patch test made with a 10% suspension of amidopyrine applied to the unabraded skin.

The character of the response to the drug as observed in these cases is such that a toxic or pharmacologic action is most unlikely. The amount of amidopyrine that could possibly be absorbed from a few drops of a 10% suspension applied to the unabraded skin would be so minute that even were a drug of marked toxicity used an appreciable clinical effect would be almost inconceivable. It is well known that drugs of the type represented by amidopyrine frequently are responsible for various manifestations of drug hypersensitivity, usually in the form of a dermatitis.

It is common knowledge that leukopenia is present during acute serum sickness. A marked depression of the leukocyte count frequently accompanies a general reaction during allergic therapy. Kollmer indeed speaks of fever, chills and leukopenia as being quite characteristic features of an allergic or anaphylactoid drug reaction.

Kracke's hypothesis assumes one or more of the oxidation products of the so-called "benzamine" drugs to be responsible for the toxic action on "a previously weakened, damaged, or idiosyncratic bone marrow." If this were true then we could logically expect that a person who had had granulocytopenia due to amidopyrine would show a marked granulocytopenic reaction after neoarsphenamine, arsphenamine, acetanilid or phenacetin, all of which Kracke has shown can give the same oxidation products as may be derived from amidopyrine. We have observed no such reaction at least after the use of phenacetin by some of our patients.

It is of considerable clinical significance that the symptoms which we have observed in connection with the reaction of amidopyrine—tiredness, aching in the bones, chilly sensations and fever are those which would be likely to promote readministration of such an analgesic drug as amidopyrine. We feel sure that such readministration of amidopyrine or similar drugs to a sensitive patient would repeatedly depress the granulocytes until finally bacterial invasion made possible by the absence of tissue resistance would result in the characteristic anginal lesions of the mucous membranes.

We know of no way in which the person likely to develop drug hypersensitivity can be recognized in advance. Consequently the possibility of idiosyncracy must be kept in mind constantly not only when using amidopyrine but when using any drug of a similar nature. A suspicion of drug idiosyncrasy must be checked by a white blood count. When drug hypersensitivity has developed absolute avoidance is essential and special care must be taken to avoid the drug in disguised or hidden forms.

We have seen no cases of granulocytopenia which followed the use of barbiturates alone and in our experience have seen no evidence which would incriminate these drugs.

We do not feel that the use of amidopyrine or amidopyrine-containing drugs is precluded by these reactions. Idiosyncrasies exist to many exceedingly valuable drugs including morphine. It is, however, important that every physician using drugs of the amidopyrine type should be aware of the possibility of granulocytopenia and protect his patients by white counts made at frequent intervals when such drugs are used. Because the symptoms of idiosyncrasy so closely resemble those for which the drug is usually taken, self-medication and the indiscriminate use of amidopyrine and drugs of a similar nature should be discouraged.

The Complete Dissolution of a Large Renal Calculus*

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MAN, from the time he identified urinary stone as one of his tormentors, has vainly sought a method for its dissolution.

In England, where stones were especially common in the early part of the eighteenth century, many sufferers sought relief in the various health resorts, at home and on the continent, where solvent power was claimed for the particular water dispensed. Drugs, dietary regimes and other proprietaries enjoyed popularity.

To quote Keyes, Sr.,[1] "Since Pliny's ashes of snail-shells even to the present day the wise and the foolish alike have searched unceasingly for something which, taken by the mouth, might be capable of dissolving a stone in the kidney or the bladder, and the substance has not been found. The Joanna Stephens remedies worked wonders in the last century, until Parliament (1839) bought the secret for 5000 pounds, after which they quickly fell into disuse and are now forgotten. Each of the four patients whose cures were attested by the trustees appointed by the Government to investigate the matter, died with stone in the bladder, as proved by autopsy".

Until very recent years there has been no proof of a reliable method for the dissolution of urinary stone. True, Crowell,[2] with roentgenological proof, successfully brought about the dissolution of a cystin stone in the kidney. He accomplished this by the oral administration of large doses of alkali and restriction of cystin containing foods. But cystinuria is the result of a rare metabolic disturbance. The application of the alkaline treatment with its resultant precipitation of phosphates and carbonates, rather than producing any dissolution of the ordinary type of urinary stones, is apt to accelerate their growth. In the rare occurrence of alkaline incrustation of the bladder, dissolution is brought about by acidulation of the urine and eradication of the offending urea-splitting organisms. Sir Reginald Harrison[3] long ago observed the disintegration of stones in advanced nephritics who were passing large amounts of dilute urine. These examples of favorable outcome represent a tiny minority in calculus disease. The common type of mixed stone has withstood any and all attacks on its unity.

Our knowledge of the etiology of stone formation has been correspondingly scant. Rosenow[4] demonstrated streptococci in the teeth of patients forming recurrent stones, and following inoculation of cultures of these organisms animals developed stones. The removal of infected teeth in some patients checks the process. Stasis anywhere in the urinary tract is a prominent contemporary of stones as witnessed by its occurrence in obstruction of the upper urinary tract, in diverticulum and in the bladder of prostatic obstruction. Infection in the urinary tract, faulty diet, and the passage of too concentrated urine, are frequently associated contributory factors. Recently hyperparathyroidism[5] has been observed complicated with calcium-laden urinary stones. However, many patients form stones, some in cycles, without any demonstrable evidence of the aforementioned conditions.

Early experimenters in vitamin A deficiency, Van Leersum,[6] Osborne[7] and Mendel and others, noted the frequent occurrence of stone in their animals. McCarrison[8] in 1926 produced stone consistently in about 50 percent of his animals fed with a vitamin A deficient diet, while in the control animals there occurred no stones. His work has been corroborated by Fujimaki[9] in Japan.

The first inkling of a means of dissolving formed urinary stones came with the result of McCarrison's[10] further experimentation. With those animals which had formed stones on a vitamin A deficient diet he reversed the order and gave them a vitamin A rich

* Presented at the meeting of the Wisconsin Urological Society at Madison, Wisconsin, October 6, 1934.

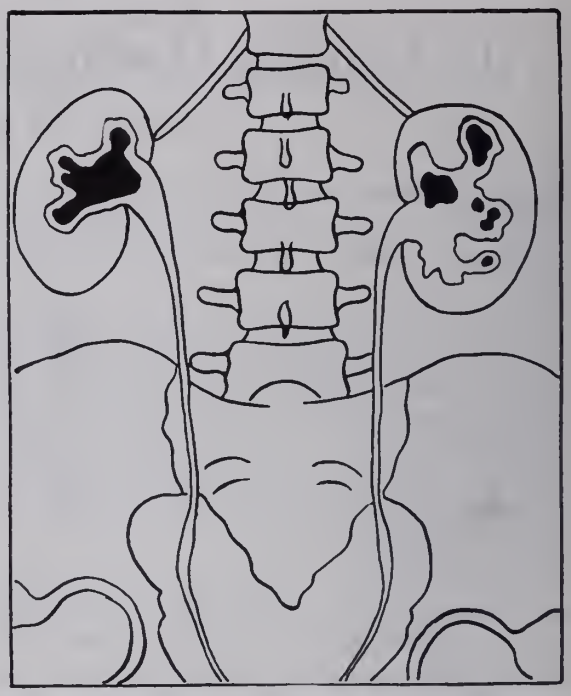

Fig. I. February 19, 1934. Roentgenogram and diagram. Large dendritic stone in right kidney. Multiple stones in left kidney.

diet and in some animals observed in roentgenograms the disappearance of stone.

Physicians, and urologists in particular, have been lax in adopting vitamin A feeding to stone-forming patients as a preventive measure against recurrence. Besides eliminating foci of infection, overcoming stasis and infection in the urinary tract, and recommending a free water intake, the diet should be augmented with vitamin A and other vitamins as well which act synergistically and enhance the effect of vitamin A. This may be brought about by the administration of cod liver oil capsules and brewer's yeast tablets together with a vitamin rich general diet. During the past seven years the writer[11] has treated some two hundred and forty odd cases of urinary stone with singularly few instances of recurrence in those patients who followed persistently the vitamin rich diet.

At the Cleveland session of the American Medical Association, Higgins[12] of the Cleveland Clinic demonstrated with roentgenograms the clinical dissolution of stone in patients following a diet rich in vitamin A. His treatment also prescribes foods which form an acid ash to insure a constantly acid urine.

According to the modern conception the omission of this regime constitutes neglect in the management of urinary stone formers.

The following case report discloses the occurrence of complete dissolution of a large stone in a patient whose indifference and capricious appetite caused a postponement of this dietary regime. No vitamin therapy or urinary acidulation was carried out. During the course of nine weeks, while the chief fluid intake was in the form of bottled beer, there occurred an unexplainable disappearance of a large branching calculus. According to my knowledge, this represents the first proven occurrence of this phenomenon.*

CASE REPORT

Case No. F536—1934. St. Luke's Hospital. Referred by Dr. E. L. Baum.

A widow, aged 42, of Polish birth, entered the hospital on February 16, 1934, acutely ill with severe intermittent pain in the left kidney region radiating

* Dr. Ira Sisk, Madison, in discussing this presentation demonstrated a similar dissolution of a large renal stone in a young girl.

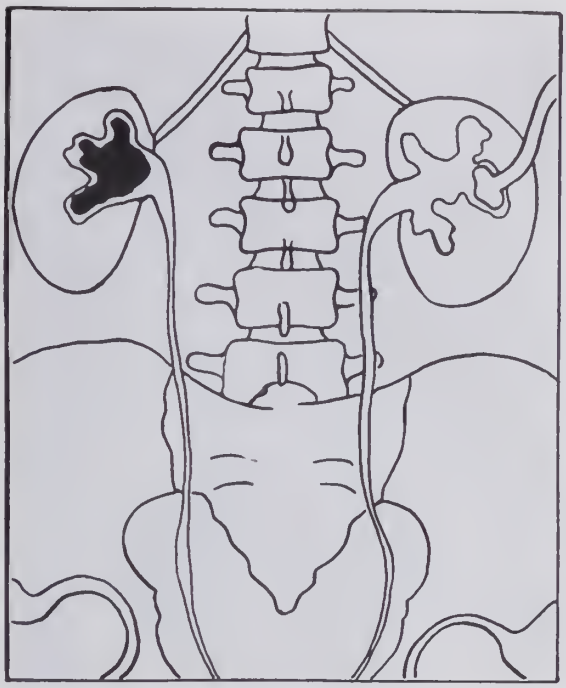

Fig. II. March 10, 1934. Roentgenogram and diagram. Large stone in right kidney persists. Left kidney pelvis injected through ureter catheter showing pelvis assuming nearly normal contour. Other films taken at this sitting showed absence of stones on the left.

to the bladder, fever, chills, frequency and a bloody urine.

At the age of 32 years an ectopic pregnancy was removed. An appendectomy was performed at 36 years.

About ten years ago there developed gradually increasing pains in both kidney regions. There were repeated attacks of severe colic on the right side, with fewer attacks on the left side. Gradual weakness and fatigue developed.

For five days preceding entrance high fever with chills, acute frequency, left kidney pain, extreme exhaustion and a bloody urine were present. The temperature was 104° on entrance.

Physical examination revealed an acutely exhausted dehydrated woman in fair state of nourishment. There was exquisite tenderness in both flanks.

The urine was cloudy with acid reaction (it remained acidic at all subsequent hospital and office tests), albumen grade 1, sugar grade 3, pus grade 3, blood grade 2 and bacteria grade 3. The Ziehl-Neelsen stains for tubercle bacilli were negative. The gram stain showed numerous colon-like bacilli. The coagulation time was two minutes, the red count was normal and the white count 13,950. Blood cultures were negative. The blood N. P. N. was 18.7 mgs. per 100 cc. and the sugar 100 mgs. per 100 cc.

Roentgenograms of the urinary tract showed bilateral kidney stones. (Fig. 1)

Cystoscopy, ureter catheterization and pyelography demonstrated a large pyohydronephrotic left kidney containing a number of large stones with low function, the phthalein appeared faintly in 7 minutes. The right kidney, despite the presence of a large branching stone, showed a surprisingly small amount of pus in the urine and a good function, the phthalein appeared in 4 minutes in good concentration.

On February 26, 1934, a left nephrostomy was done with evacuation of pus and the stones. A No. 30 F. pezzer catheter was left in the kidney. In bilateral stone, operation upon the worst kidney first is our usual procedure. In this instance the acute pain and sepsis originating in the left kidney made it imperative to promptly establish left kidney drainage. On March 3, 1934, a blood transfusion of 500 cc. was administered. A cystoscopy on March 10, 1934, two catheters were placed well up the left ureter for dilatation, drainage and irrigation of the left kidney. Roentgenograms revealed the absence of stones in the left kidney and the persistence of the large stone in the right kidney. (Fig. 2)

Recovery was quite uneventful. Repetition of the blood sugar estimation gave normal readings. She insisted upon leaving the hospital on March 25, 1934. Her appetite was very poor and she was non-cooperative about taking medication or forcing food and fluids. She was urged to take ample fluids. Most fluids were distasteful to her except beer. Twenty ounces of bottle beer daily during her stay at home represented the bulk of her fluid intake. The pezzer catheter remained in the nephrostomy wound.

Upon her return to the hospital for re-examination on May 6, 1934, nine weeks following operation, there was a marked improvement in her condition

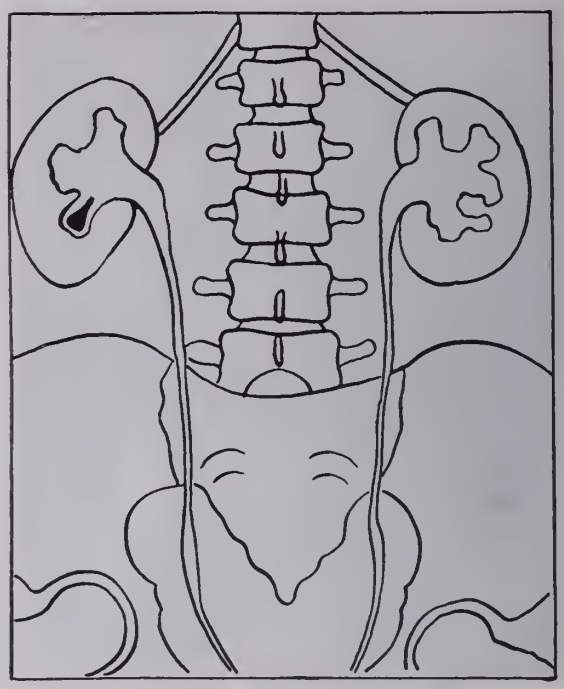

Fig. III. May 6, 1934. Roentgenogram and diagram. Right kidney stone has disappeared except for a fragment in lower calyx. Left kidney region is clear.

with a gain in weight of approximately 12 pounds. The pezzer catheter had come out three weeks previously. Urinary tract roentgenography (Figure 3) revealed, in a lower calyx, only a remnant of the huge stone which previously filled the right kidney pelvis. The urine showed only a trace of albumen and a marked diminution in the amount of pus B. coli but the sugar was rated positive grade 4. The blood N. P. N. was 22.4 mgs. per 100 cc. and the blood sugar reading was 181.8 mgs. per 100 cc. Our original impression of the occurrence of renal glycosuria was changed to a diagnosis of diabetes with the rise of blood sugar above normal limits. Ureter catheterization brought a good urinary output from both sides. A small amount of pus and B. coli came from both kidneys—slightly more from the right. The function was excellent on either side; sugar was excreted in about equal amounts and the phthalein appeared in 3½ minutes on both sides. Intravenous urography indicated good function in each kidney. Both kidney pelves were slightly dilated.

In order not to disturb the startling process that was going on, her diet was unchanged except to limit carbohydrates sufficiently to keep the urine sugar-free. Urotropin by mouth was administered.

Her gain in health was remarkable. She opened a tavern in July 1934.

On October 2, 1934, urinary tract roentgenograms (Fig. 4) showed both kidneys free of stone and the fragment which occupied the lower calyx of the right kidney had now been reduced in size and had migrated to the lower right ureter. Until this time the elimination of the disintegrating stone was entirely unaccompanied by severe pain or colic. On September 6, 1934, following ten hours of severe right ureter colic she passed a fragment of stone, the last vestige of her quarry.

COMMENT

The explanation of why the stone dissolved is lacking. No doubt if the brewers learn of this remarkable happening they will advertise an added virtue for beer. While the patient consumed a moderate amount of beer, the effect on the disappearance of the stone is questionable. Beer contains no vitamin A. Vitamins B and G are present in fair amounts and vitamin D in traces. The lactic acid content of beer ranges from .15 to .2%. Among the peculiarities of this acid is its faculty of readily combining with the calcium of other salts with the formation of the soluble calcium lactate. In the prescribing of acid urine forming diets beer offers an excellent fluid, especially the non-alcoholic brew in which the acid content is unchanged. While succinic acid derivatives have long been used in the treatment of urinary stones, no proven case of dissolution is on record. Succinic acid appears in small amounts in all yeast fermentation but it seems unlikely that the

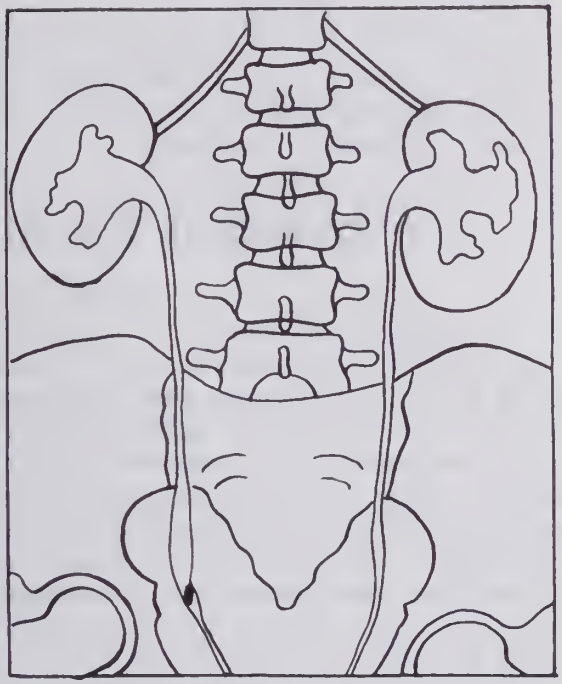

Fig. IV. October 2, 1934. Roentgenogram and diagram. Both kidney regions clear. Small stone in lower right ureter.

traces in beer would be effective in attacking stone.

During the period of stone disintegration the diabetes progressed as manifested in the marked glycosuria and hyperglycemia. Here again diabetes offers no consolation to the stone former as diabetes and calculus disease occur concomitantly. Recently the author conducted a series of experiments to test the effect of various glucose solutions upon urinary stones. Accurately weighed fragments of stone were placed in plain diabetic urine, urine with 10 percent glucose, urine with 20 percent glucose, and distilled water with varying amounts of glucose added. The tubes were incubated at body temperature, agitated and autoclaved periodically to destroy bacterial action. After two months the stone fragments were removed, dried and weighed. They were unaffected.

While this patient's large stone dissolved and was excreted painlessly except for the colic accompanying the passage of the last fragment, and without the aid of vitamin A therapy, it should not dissuade us from applying this diet as well as every known preventive measure to each stone former. It gives us encouragement in our search for a method that will simply but consistently dissolve the urinary stone.

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My thanks are due Dr. J. W. Lawrie, research director, Schlitz Brewing Company, for information about the chemistry of beer and Mr. Leo Massopust, director of the Department of Art, Marquette University School of Medicine, for the illustrations.

Abnormal Positions of the Kidneys*

By W. G. SEXTON, M. D.
Marshfield

ACCURACY in diagnosis has always been one of the chief aims of the medical sciences because all successful therapeutic measures depend primarily upon exact knowledge. The contributions of urologists have been of inestimable value. The development of the cystoscope, renal functional tests, blood chemistry, and urography have almost placed urology in the field of the exact sciences. In recent years, the introduction of various intravenous dyes for visualizing the urinary tract, has given all physicians who have adequate x-ray equipment, the means of making accurate urological diagnoses without the use of the cystoscope. Direct, or intravenous urograms, are of great value, but like all other clinical methods, have distinct limitations. When these dyes show normal pyelograms in normal position, then one has done a great deal towards eliminating a lesion in the urinary tract. The deviation from this normal picture, especially in a case of suspected tumor or renal tuberculosis, should always be verified by a complete and thorough urological study.

To fully understand urography, one must have a clear conception of those factors which may cause marked deviation from the normal position of the kidneys. It is unnecessary to spend much time upon tumors of the kidney, whether these be malignancies, polycystic disease, or hydronephrosis. Urography is often called upon to differentiate these conditions from abdominal lesions. The essential variation in position in these cases is due entirely to the increase in size of the kidney.

The most common cause of abnormal position is nephroptosis in its various degrees, usually secondary to or associated with a general visceroptosis. This condition seldom causes much confusion. However, it is perfectly possible to have an early malignancy in a ptosed kidney. A large renal calculus may pull the kidney downward by its weight alone, so that its position may be confused with that of an enlarged gall bladder. Retroperitoneal tumors usually push the kidney downward toward the bony pelvis. Dr. Waltman Walters has recently called attention to the fact that this displacement may be noted in tumors of the adrenal. It must not be forgotten that retroperitoneal tumors may displace the kidney even to the opposite side of the body, giving pyelograms that may suggest that of unilateral fused kidneys, but the normal degree of rotation of the pelvis rules out the fusion type. The fusion type of renal anomalies forms one of the important causes of abnormal positions. In all fused kidneys there is a failure of rotation of the kidneys, so the pelvis and ureter are always anterior. The horseshoe kidney is lower than normal, closer to the spine, and the pelvis is either parallel to the spine or has its lower pole directed downward and inward, just the reverse of the normal position. The calices appear to be pointing in anterior posterior direction.

It is very essential to recognize this condition if one is to attempt a pyelotomy for calculus, for this must be done on anterior surface. Ectopic kidneys are rare, but we have had two cases in the past few years, so it should always be taken into consideration if the kidney is not found in its normal position.

* Read before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, September, 1934.

It is well recognized that the intravenous dyes are also tests of renal functional activity. When no shadow appears on one side, we are inclined to believe that it is due to a non-functioning kidney. The shadow may be in the pelvis and may not be recognized, especially if the kidney is badly diseased.

CONCLUSION

One may find the kidneys in many abnormal positions due to ptosis, pressure of retroperitoneal tumors, or congenital anomalies. Before any operation is undertaken on a misplaced kidney, one must be certain it is not an anomaly which has a pelvis anteriorly and a great variety of blood supply.

Report of Two Cases of Unilateral Postencephalitic Parkinsonian Syndrome

By E. M. JORDAN, M. D.
Green Bay

I WOULD like to present two cases of postencephalitic Parkinsonism which offered some difficulties in diagnosis. Both cases were entirely unilateral and while a considerable number of cases of Parkinsonism are unilateral, these two cases presented some rather unusual features.

CASE REPORTS

The first case was that of a middle aged man, first seen in April 1933, a typesetter by occupation. The family history was negative except that his mother was said to have died of locomotor ataxia. His chief complaint was tremor of his right hand. He had influenza in 1918 but did not remember having had headache, diplopia, delirium or somnolence. In 1929 he developed a sense of numbness in his right arm, most noticeable when in bed. Tremor of the right hand appeared about the same time. The tremor was so coarse that it interfered with his work. After six months he consulted a physician who gave him some electrical treatments following which the tremor entirely disappeared for four days. After four days the tremor recurred and was not affected by subsequent treatment. The tremor disappeared during sleep but came on a few minutes after he got up in the A. M. This man had been under a great nervous strain. His wife had been ill and he developed a great fear of losing his job.

On examination, he was a well developed, healthy looking man. There was a slight immobility of his facial muscles. His eyes were normal. His tonsils were infected. Heart, lungs and abdomen were negative. There was a coarse tremor of his right hand which was increased definitely when his attention was directed to it. The tremor was almost entirely stopped by pressure in the spinous processes of the upper dorsal vertebrae and suggesting the result. There were no pathological reflexes and sensation was normal.

Because of the extreme anxiety of this man concerning his wife and his job; because of the history of cessation of the tremor by electrical treatments, and because of stopping of the tremor by suggestion, I felt that this patient probably had a hysterical complex born of fear and nourished by emotional instability and self-pity. His tonsils were removed and it was suggested to him that this would probably help his tremor. However, it did not. Other forms of suggestion were used but without any result. I watched him over a period of several months and during this time he developed a typical mask-like facies and typical pill-rolling tremor. It was evident that he had a true postencephalitic Parkinson's syndrome. He was given sedatives—stramonium and hyoscine and responded fairly well to treatment. He is still working and his wife is still ill, but he has adjusted himself fairly well to his condition. Thus far there have been no signs of a tremor anywhere else except in his right hand.

2. The second case was that of a young man of 23 years who came to the clinic last February. His family history was entirely negative. His complaint was tremor of the left hand, and "pulling backward" of the head. In 1918, at about the age of seven years, he had influenza. He was delirious for three days and for two days slept almost constantly. He had no rememberance of diplopia or any visual disturbances. Following the flu he remained perfectly well until two years ago when he developed a kind of rheumatic pain in his left foot which subsided in two weeks. Following this he developed a pulling sensation in his neck muscles as a result of which his head was pulled backward and to the right. At the same time he began to carry his arm in a peculiar manner, with the left elbow and wrist flexed. He soon noticed that the muscles of his left side were becoming rigid. Soon after this he developed a coarse tremor of his left hand and foot. The rigidity of his muscles and the torsion of his neck became more marked. It was then noticed that his face was losing expression and his father stated the wrinkles in his face seemed to be "ironed out." A few months before his examination he had developed a burning pain at the base of his neck. He stated that at times

(Continued on page 214)

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« « « EDITORIALS » » »

Urinary Tract Calculi

KIDNEY and bladder stones have been among our oldest known diseases. Investigations and examinations have revealed that the composition of such stones is the same today as it was a thousand years ago. While we have advanced greatly in our knowledge of urinary tract stone, both from the standpoint of etiology and their management, the exact etiology is not known. Certain studies would seem to indicate that the same etiologic factors which produced stones hundreds of years ago are the same factors which are responsible for the production of stones now.

The role played in the production of urinary tract calculi by such factors as stasis, chronic urinary tract infection, and the generalized metabolic disturbance due to hyperparathyroidism are properly recognized and treated.

During recent years a great deal of attention has been given to the hypothesis that calculus formation is a deficiency disease and considerable experimental work on laboratory animals subjected to various diets has been done. The experimental evidence is not conclusive, although a good deal has been added to our knowledge of the subject.

Joly believes that the hypothesis that stone formation is a deficiency disease is the most plausible theory that has yet been advanced. He feels it explains all of the principal features of the condition as we know them and also gives a reason for the variation in incidence of urinary tract stone during the past years.

Higgins, Livermore, and others recently confirmed previous experiments wherein urinary tract calculi could be produced in laboratory animals on vitamin A deficiency diets. Higgins demonstrated also that by restoring vitamin A to the diet many of the stones which had formed would disappear, according to roentgenographic evidence. Higgins and associates, for the past two or three years, have been prescribing a diet high in vitamin A content, which is also an acid ash producing diet, to their patients who have been operated on for renal and ureteral stones. They have had a small series of cases in several instances where stones in the kidney have disappeared according to roentgenographic examination. In two other patients large bilateral renal calculi have definitely decreased in size. Other results obtained in their cases have convinced them that diet is an important factor in the management of these cases.

No doubt the recent work of many along these lines will cause a great many clinicians to employ diets in the management of their urinary tract stone cases. The author believes that such diets have a distinct value in the management of some of these cases,

however, he also feels that the field is rather limited. It is to be hoped that in the enthusiasm which will be shown in the employment of these new measures, the diet will not be prescribed indiscriminately; that all cases showing urinary tract calculi will be thoroughly studied and carefully followed during such treatment and that in those cases presenting evidence of needing surgical intervention to preserve kidney function, the surgical measures should be employed first and the dietary measures afterward.

G. H. E.

A Reminder

SINCE January 1st, 1934, a total of 1,370 cases of cancer have been reported to the State Board of Health. Of the 360 cases reported since December 1st, 1934, over 35 percent were reported from a single county containing less than 120,000 population. This indicates that the physicians in some cities of the state are apparently not reporting their cancer cases. If these records are to be of value to medical science they must be as complete and accurate as possible.

The state board of health has been made custodian of these reports. These records are strictly confidential and are accessible only to persons properly authorized to study them.

This is a State Medical Society program and every physician in the state should be interested in its success. We would suggest, therefore, that the secretary of each county medical society bring these facts to the attention of the members of his society.

Over 15,000 report cards have been mailed to physicians and hospitals throughout the state. Additional cards will be supplied upon request. G. W. H.

Dan. V-VII

IN READING obituary notices in our daily newspapers, one is struck with the ever increasing mortality of cardiovascular disease among men in the fifth and sixth decades of life. Men in all walks of life, too, but particularly men who have played a prominent and active role in the crowded drama of modern business. Lawyers, engineers, manufacturers, doctors,—with years of achievement behind them and years of success ahead,—all lines have their representation in the cold, relentless columns of victims of what the lay public knows as heart disease. The doctors especially are well represented, so much so that this malady is frequently referred to as "doctor's disease."

The insurance companies are evidently viewing with alarm their increasing mortality among higher insured risks. This is evidenced by their occasional willingness to loosen up more than five dollars for a first class opinion on a possible two hundred thousand dollar risk!

But what is the cause of all this loss of life? Why is this disease taking such an enormous toll among men who are at the acme of their ability, at the very prime of life?

If the thinking physician will but scan his experiences with patients of this type, he will be able to answer this question. For this question's answer is to be found in the doctor's log book and no where else.

In the handling of cases of this order, getting the patient to listen to reason is the physician's most difficult obstacle to overcome. To lay the cards on the table and simply dictate to a man (who perhaps is somewhat of a Mussolini himself) that he must cut down his speed and must curtail his activities, is a tough job. If the physician's opinion and advice appeals to the patient, then all goes well. But this is most infrequent with patients of this class. The rub comes when the intelligent doctor, seeing the handwriting on the wall, lays down the law to the patient,—the only law that will save him,—and the patient resents it, refuses to be told that he is in a serious condition.

Every doctor has heard the arguments of these patients: "I can't slacken up, my business won't allow it." "No one can take my place, no one can do my work." "Take it easy? Nonsense! I can do more work now than I ever did."

And it is difficult to subjugate a dominat-

ing man who has been going strong for thirty years,—difficult, and oftentimes impossible. Few of these men "can take it," to use a common phrase, and they resent the physician's advice. They call him an alarmist, and looking about for another type of doctor, they are careful to get a "yes man," one who does not advise them to do impossible things such as cut down their business activities, but rather one who makes them think they are in fine shape.

It takes a great deal of nerve for a doctor to deal rightly with a case of this kind,—more nerve than it takes to remove a difficult gall bladder,—and there is mighty less remuneration. But it *is* up to the doctor. He is the one, and the only one, who can read the handwriting on the wall. It is his duty to translate it for his patient, as Daniel read it to Belshazzar—*"Mene—Mene—Tekel—Upharsin."* (Dan. v-vii)

G. A. C.

Hyperparathyroidism and Urinary Calculi

URINARY stasis and chronic urinary tract infection long have been recognized as dominant etiological factors in the formation of urinary tract stones. That race, diet, water and mineral intake have had a certain indefinite bearing has also been generally understood. More recently, dietary deficiencies, particularly vitamin A, have come to be recognized as of some etiological significance in stone formation. And now comes still another factor that promises to add its bit toward a more clear understanding of the etiology of urinary calculi.

The recent epochal studies of Mandl in Vienna and DuBois in this country have proven the fact that osteitis fibrosa cystica (von Recklinghausen's disease) is but a clinical manifestation of hyperparathyroidism and have set it definitely apart from Paget's and other diseases within the general group of skeletal decalcifications. When fully developed, this general skeletal decalcification quite obviously must manifest itself by rheumatoid bone pains, pathologic fractures, and the like. But with such massive loss of bone phosphorus and calcium, it is not surprising to note other equally definite, if less classic, symptoms. The constant over-concentration of blood calcium adds an element of lassitude and lowered neuro-muscular response—the antithesis of tetany—to hyperparathyroidism. Of more recent interest, the persistent escape of quantities of calcium and phosphorus through the kidneys begets certain urinary tract changes, prominent among which is that of the formation of multiple and recurring stones. In fact, so direct and prominent is this newly recognized chain of urinary changes that Albright and his coworkers at the Massachusetts General Hospital in a recent analysis of seventeen proven cases of parathyroid adenoma report the interesting observation that eight of their cases came to a recognition of their condition through a routine study of the calcium and phosphorus metabolism in cases of multiple or recurring urinary stones.

Most urinary tract stones occur through etiologic factors long understood and in many cases quite obvious and correctible. All too frequently in the past, however, an unfathomable mystery has surrounded those not infrequent cases in which stones have been encountered without any etiological basis sufficiently obvious to suggest how best they might be treated and by what means recurrence might be forestalled. Particularly has this been true in those instances in which calculi have been multiple, bilateral or recurring. Such cases should be given the benefit of a thorough search for evidence of hyperparathyroidism. Blood calcium above the normal of 11. mgm. associated with blood phosphorus below the normal 3.5 mgm. is very suggestive. When accompanied by x-ray and clinical evidences of skeletal decalcification, recent experience indicates that surgical exploration of the neck quite consistently proves the presence of a parathyroid tumor. By its removal a normal balance in calcium metabolism may be had with clinical cure of the osteitis fibrosa cystica, and, still more interesting, positive prevention of the reformation of urinary stone.

J. C. S.

SOCIETY PROCEEDINGS

BROWN-KEWAUNEE-DOOR

A dinner meeting of the Brown-Kewaunee-Door County Medical Society was held on February 9th at the Northland Hotel, Green Bay. Dr. Morris Fishbein, editor of the Journal of the American Medical Association, was the principal speaker his subject being "Our Changing Times."

COLUMBIA

Dr. H. W. Virgin of Madison spoke on foot disorders before a meeting of the Columbia County Medical Society the latter part of January.

Dr. A. W. Bryan, also of Madison, discussed "Arthritis."

DANE

A meeting of the Dane County Medical Society was held on February 12th at the Park Hotel, Madison, at eight o'clock. The speaker of the evening was Dr. Ovid Meyer of Madison. Dr. Meyer talked on the present status of the treatment of anemias.

A general discussion followed by Drs. William S. Middleton, Charles Burke and Albert Bryan.

Drs. Myra Burke, R. P. Montgomery, W. C. Kleinpell and Herbert W. Virgin, Jr., were elected to membership.

Committee reports followed. N. T.

EAU CLAIRE-DUNN-PEPIN

Members of this Society held a dinner meeting at the Hotel Eau Claire on January 28th. The following papers were presented:

"General Allergy" by Dr. Elmer M. Rusten, Minneapolis.

"Interpretation of Some of the Common Symptoms Referable to the Ear, Nose and Throat" by Dr. R. Boies of Minneapolis.

GREEN LAKE-WAUSHARA-ADAMS

The following officers were elected at the February meeting of the Society: President, Dr. Orvil O'Neal of Ripon; Vice President, Dr. Paul L. Eisele, Ripon; Secretary-Treasurer, Dr. A. J. Wiesender of Berlin; Delegate, Dr. Wiesender; Alternate, Dr. George E. Baldwin of Green Lake; Censors, Dr. C. U. Senn of Ripon, Dr. Baldwin and Dr. G. G. Mueller of Green Lake.

KENOSHA

Members of the Kenosha County Medical Society held a meeting on February 19th at the Kenosha Hotel.

Dr. Norbert Enzer, Milwaukee, was the speaker of the evening, his subject being "The Pathology of the Heart."

A business session concluded the meeting.

RICHLAND

The Richland County Medical Society at its January meeting was addressed by Dr. Harold E. Marsh of Madison on the subject of "Pneumonia" and Dr. H. W. Virgin, who spoke on common foot disorders.

SHEBOYGAN

The guest speaker at the meeting of the Sheboygan County Medical Society held on January 22nd was Dr. Harry R. Foerster of Milwaukee. His very instructive talk on "The Recognition and Treatment of Some Important Inflammatory Skin Diseases" was illustrated with lantern slides. A. C. R.

SIXTH COUNCILOR DISTRICT

The medical societies of the Fox River Valley, which include the Fond du Lac, Winnebago, Outagamie and Brown-Kewaunee-Door Societies, have recently organized for the purpose of inter-county meetings. The plan is to sponsor better scientific programs and to create a closer unity for the best interests in the conduct of medical care.

The Outagamie County Medical Society sponsored the first meeting Thursday, January 24th, and had as the speaker Dr. R. G. Leland, Director of Bureau of Medical Economics, American Medical Association, who is also on the technical staff of the President's Committee on Economic Security. Despite the zero weather, the meeting was attended by some 86 members, including Dr. T. J. O'Leary of Superior, President of the State Society, and Dr. S. E. Gavin of Fond du Lac, District Councilor, to whom a great deal of the success of this meeting was due, and Dr. Gilbert E. Seaman of Oshkosh, who introduced the speaker.

"We must unite individual effort into one movement if medicine shall remain as a profession and an institution," Dr. R. G. Leland said in his talk on sickness insurance proposals. Outlining disadvantages of current sickness insurance proposals, Dr. Leland urged that measures be taken to inform every physician in the state about the present situation with regard to changes in the practice of medicine.

The vital questions, he said, are whether the proposals that are coming from organizations outside the medical profession will provide a better method of practicing medicine than have been used successfully for hundreds of years, whether they will pro-

vide better medical service and whether it will cost less.

The victory of disease is as bright in the United States without insurance as in any country which employs the system. The vast number of employees necessary to administrate the insurance plan will add considerably to the cost of the project.

He says that physicians everywhere must make themselves fully conversant with the trend of the legislation that is proposed so that they may, in turn, enlighten the Senators and Representatives who speak for them in Congress. This we must do to secure for the American people the continuance of the high quality of medical care that has been theirs up to the present time.

The speaker was well received by the physicians present and the meeting was in every respect a success. G. W. C.

GREEN BAY ACADEMY OF MEDICINE

Dr. H. V. Foshion of Algoma gave an address on "Malformations of the Uterus Complicating Pregnancy" before a meeting of the Green Bay Academy of Medicine held on February 12th.

MADISON ACADEMY OF MEDICINE

A meeting of the Madison Academy of Medicine was held at the Park Hotel, Wednesday evening, February 27th, at eight o'clock.

Mr. J. G. Crownhart, Secretary of the State Society, was the guest speaker. His subject was "Changes Proposed for Medicine."

MILWAUKEE ACADEMY OF MEDICINE

At the annual meeting of the Milwaukee Academy of Medicine held on January 15th, the following officers were elected: President Elect, Dr. A. W. Rogers; Vice President, Dr. F. D. Murphy; Secretary, Dr. T. L. Squier; Treasurer, Dr. J. J. Pink; Librarian, Dr. W. P. Blount; Membership Committeeman, Dr. F. W. Madison; Council members, Drs. J. O. Dieterle, J. L. Garvey, T. J. Howard, W. M. Jermain, D. W. Mackoy, and E. W. Miller. Dr. Ralph P. Sproule is the President of the Academy for 1935.

A meeting of the Milwaukee Academy of Medicine was held on Tuesday, February 12th. The following program was presented:

1. Presentation of Cases.
2. "The Treatment of Peripheral Vascular Diseases" by Dr. Louis G. Herrmann of Cincinnati, Ohio, assistant professor of surgery, University of Cincinnati.

MILWAUKEE NEURO-PSYCHIATRIC

Officers for 1935 were elected at the meeting of this society held on January 24th: Dr. J. L. Garvey, President; Dr. D. W. Roberts, Vice President; Dr. A. Augur, Secretary and Treasurer. Councilors are Drs. W. L. Herner and M. Kasak.

MILWAUKEE OTO-OPHTHALMIC

The annual meeting of the Milwaukee Oto-Ophthalmic Society was held at the University Club on January 15th. Following the scientific meeting which comprised a paper on "An Instrument for the Determination of Maximum Convergence" by Dr. Hilmer G. Martin, officers for 1935 were elected: President, Dr. J. J. Brook; Vice President, Dr. H. G. Martin; Secretary-Treasurer, Dr. H. G. Schmidt.

The program for the February meeting of the Milwaukee Oto-Ophthalmic Society on the 12th consisted of the following papers:

"Laryngeal Neoplasms and their Management with Report of Cases" by Dr. Joseph C. Beck and Dr. M. Reese Guttman, Chicago. Discussion by Dr. John E. Mulsow.

"Vascular Tumors of the Orbit and their Treatment." Presentation of Patient. (Entrance Thesis). By Dr. Alvin J. Brah. Discussion by Dr. Edward R. Ryan.

MILWAUKEE SOCIETY OF CLINICAL SURGERY

The February meeting of this Society was held on the 25th at the University Club. Following dinner at six-thirty o'clock, a scientific program was presented.

Dr. H. A. Heise spoke on "Blood Transfusion in Emergency Surgery"; Dr. Ralph M. Waters, Madison, discussed "Anesthesia in Emergency Cases" and Dr. F. A. Besley, professor of surgery, Northwestern University, gave an address on "Treatment of Compound Fractures."

Discuss Mental Deficiency at Chicago, April 25

The Annual Meeting of the American Association on Mental Deficiency will be held at the Hotel Palmer, Chicago, on April 25, 26, and 27. The Thursday and Friday sessions will be devoted to studies on Mongolism; Birth Injury as an Etiological Factor in Mental Deficiency; Mental Disorders in Mental Deficiency; The Problem of Sterilization; Defective Delinquency and its Relation to Penal Institutions; Community Supervision of the Paroled Mental Defective; and Newer Methods in Institutional Training for Community Life. The Saturday session, on April 27, will be devoted to the sociological, psychological, and the special educational aspects of Mental Deficiency. Physicians are cordially invited to attend these sessions. Complete data on the program may be obtained from the Secretary, Dr. Groves B. Smith, Godfrey, Illinois.

THE WOMAN'S AUXILIARY

Mrs. Rock Sleyster, 1220 Dewey Ave., Wauwatosa, *President*
Mrs. F. Gregory Connell, 420 Washington Blvd., Oshkosh, *President-elect*
Mrs. George H. Ewell, 2024 Kendall Ave., Madison, *Secretary*
Mrs. Donne F. Gosin, 631 S. Quincy Ave., Green Bay, *Treasurer*
Mrs. R. W. Tomlinson, 1021 Park Place, Wilmington, Del., *National President*

TO CHAIRMEN OF ARCHIVES AND HISTORIANS

Our aim is to have a perfect record of the accomplishments of the Wisconsin Auxiliary. Your State Auxiliary now has a scrapbook which has grown quite large and contains some valuable as well as interesting material beginning with the organization of the Wisconsin Auxiliary at Madison in 1929, up to the present time. This material includes information about each of the six annual meetings of the State Auxiliary, National Conventions, programs, photographs, membership reports, names of state officers and chairmen for each year together with names of county officers, letters from national officers, newspaper clippings of activities in the various counties, outstanding reports of chairmen, and other valuable material. The minutes of the State Auxiliary are preserved in the bound minute book. The Auxiliary pages from the Wisconsin Medical Journal are kept on file in the State Society office.

To be complete, however, information from each county auxiliary should be included in the archives. With the cooperation of the seventeen county auxiliaries, your state archives chairman can maintain a complete historical record. All material will be gratefully received and placed in chronological order in the scrapbook.

In the event a county auxiliary desires to prepare a history of its organization, it should contain an account of the early organization—by whom organized, others co-operating, time and place of meeting, as well as officers elected, membership or charter members. The history should contain a record of each subsequent year—officers, members who have held state or national office, activities, health education, HYGEIA, special projects and significant dates. Be sure to date everything. It would be splendid to record in the state archives a copy of the history of every organized county, prepared by the county historian.

Good publicity goes into archives. How well is your County Auxiliary represented? If you really want other members of the State Auxiliary to know that you have a live organization, and if you want to be represented in the State Scrapbook, you will have to send in material pertaining to your County Auxiliary. REMEMBER TO DATE EVERYTHING.

Your Archives chairman is desirous of as many clippings as it is possible for each county auxiliary to send. First: see that publicity of any activities pertaining to your Auxiliary is sent to the local paper. Second: see that any publicity is clipped, *dated*, and forwarded to the Chairman of Archives, 520 N. Pinckney Street, Madison, Wisconsin.

The Archives of the State Auxiliary will be exhibited at the National Convention in Atlantic City in June, and we want an exhibit of which our Wisconsin Auxiliary can be proud!

MRS. C. A. HARPER, Madison,
State Archives Chairman.

PUBLIC RELATIONS

If one object of the Woman's Auxiliary is to extend the aims of the medical profession to all organizations which look to advancement of health and education, it would seem that the duties of the Public Relations chairman are very important.

It is through her efforts that contacts are made and cooperation stimulated between the Woman's Auxiliary and these other organizations.

The chairman of Public Relations should be chosen because of her ability to make such contacts.

She should recommend that at least once each year an open meeting be held and that a health speaker, approved by the medical profession be provided. Great effort should be made to have a crowd and special invitations extended to leaders in other woman's organizations. She should urge woman's clubs wishing for extra programs to allow the County Auxiliary to furnish a program. There are lists of health talks sponsored by Educational Committees of the Medical Societies on subjects with and without slides: for general audiences, for Parent-Teacher Associations, for boy's and for girl's groups and for Woman's clubs. All with little or no charge. The Public Relations chairman should try to get auxiliary members to become interested and to hold influential positions in all other organizations in their county, not alone to make friendly relationship but to help perform the Auxiliary's greatest service by bringing about an understanding and cooperation between the profession and the public.

MRS. GREGORY CONNELL, Oshkosh,
State Public Relations Chairman.

FROM THE NATIONAL HYGEIA CHAIRMAN

We were glad to hear from you, and to receive the splendid report on Hygeia. We are proud of your State indeed.

The article in the January issue of the Wisconsin Medical Journal was splendid and it shows that the women in Wisconsin are able to produce workable plans for their State.

We are proud of Dane County and other counties who are active in putting over the piece of work which our American Medical Association asked us to do.

We are enclosing a Hygeia Handbook that you may read the resolution of the House of Delegates of the American Medical Association. I am sure they are as proud of Wisconsin as we are.

"Three cheers for Wisconsin"!

MRS. JAMES D. LESTER, Nashville, Tenn.,
National Hygeia Chairman.

RESOLUTION

"Resolved, That the House of Delegates urge the Woman's Auxiliary to the American Medical Association, including the county, state and national organizations, to recognize as one of its chief activities the promotion of the distribution of this publication (HYGEIA) through parent–teacher associations, boards of education and similar bodies interested in education."

—Adopted at the Philadelphia Session of the American Medical Association, 1931.

HYGEIA, THE HEALTH MAGAZINE

The County Hygeia chairmen have organized their committees for 1935 and many of them have sent splendid reports of work already accomplished. While the chairmen have the responsibility of promotional plans and suggestions for increasing the circulation of HYGEIA, each member of every Auxiliary should feel the responsibility of sponsoring and advertising it. The Editorial staff of HYGEIA is constantly making every effort to improve the magazine to best aid the doctor in giving the public constructive and authentic health information. It is the only official voice of the American Medical Association in educating the public in health matters and should have the support of every progressive auxiliary member. No proper estimate of the value of the magazine can be made by anyone who is not entirely familiar with it, and every auxiliary member is urged to read it regularly and quote it often.

RUTH R. SCHULZ (Mrs. Irwin),
State Hygeia Chairman.

EXECUTIVE BOARD MEETING

The meeting of the Executive Board of the Woman's Auxiliary to the State Medical Society of Wisconsin was held at the University Club, Milwaukee, on Friday, February first, with the president, Mrs. Rock Sleyster, Wauwatosa, presiding. Twenty-four members of the Board were present.

The chairmen of the State Auxiliary presented reports and brought messages of splendid cooperation with county auxiliaries. Interesting reports were presented by county auxiliary presidents.

The Board had the privilege of hearing from two National Officers,—Mrs. Eben J. Carey, Milwaukee, National Treasurer, and Mrs. Robert E. Fitzgerald, Wauwatosa, National Press and Publicity chairman. The National Treasurer said Wisconsin ranks fifth in membership among the 41 state auxiliaries. The National Press and Publicity chairman urged the members to read the Wisconsin Medical Journal, the Bulletin of the American Medical Association, and the National News Letter of the National Auxiliary.

The president summarized the activities for the immediate future and announced the appointment of Mrs. Louis M. Warfield, Milwaukee, as chairman of the 1935 Annual Meeting.

DELEGATES TO NATIONAL CONVENTION

Delegates and alternates to the National Auxiliary Convention to be held in Atlantic City, New Jersey, June 10–14, 1935, were elected at the mid-year board meeting of the State Auxiliary.

The 1934 paid membership of the Wisconsin Auxiliary is upwards of 800; therefore Wisconsin is entitled to eight delegates and eight alternates. They are:

Delegates

Mrs. George Ewell, Madison.
Mrs. Harry Heeb, Milwaukee.
Mrs. Irwin Schulz, Wauwatosa.
Mrs. Frank W. Pope, Racine.
Mrs. Earl McGrath, Appleton.
Mrs. Oscar Friske, Beloit.
Mrs. T. J. O'Leary, Superior.
Mrs. Ralph Carter, Green Bay.

Alternates

Mrs. Gregory Connell, Oshkosh.
Mrs. Fred Nause, Jr., Sheboygan.
Mrs. J. Gurney Taylor, Milwaukee.
Miss Hertha Voje, Oconomowoc.
Mrs. Harry Keenan, Stoughton.
Mrs. Arthur J. McCarey, Green Bay.
Mrs. A. J. Wiesender, Berlin.
Mrs. Wm. Donohue, Manitowoc.

The chairman of the nominating committee, Mrs. J. Gurney Taylor, Milwaukee, recommended that in the event either a delegate or alternate named is unable to attend the Convention at Atlantic City, the president of the county auxiliary from which the delegate or alternate is named, be empowered to name some other member of her auxiliary to fill the vacancy. In the event that no member of that respective auxiliary will attend the meeting, the president of the State Auxiliary be allowed to name a member from another county auxiliary.

News Items and Personals

The State Board of Health, at its annual meeting on January 31st, reappointed Dr. Oscar Lotz of Milwaukee as a member of the Committee on Nursing Education, representing the State Medical Society of Wisconsin.

Reverend H. L. Fritschel was also reappointed to the Committee, representing the Wisconsin Hospital Association.

Both of these appointments took effect February 1, 1935, and are for a period of two years.

At this meeting, Dr. Mina B. Glasier, secretary of the Grant County Medical Society, Lancaster, took office as President of the Board and Dr. H. H. Ainsworth of Birchwood was named President-Elect. Dr. Joseph Dean, Madison, was re-elected Vice President.

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Two physicians who have recently been licensed to practice in this state have established offices. Dr. E. E. McCandless has opened an office at Birnamwood and Dr. Bevan W. Bunker, who has been at Rock Creek, Minnesota, has purchased the practice of the late Dr. J. E. Johnson of Grantsburg.

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Dr. T. L. Jacobson, Delavan, attended a postgraduate course in eye, ear, nose and throat at Tulane University during February.

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Dr. and Mrs. Rock Sleyster, Wauwatosa, are spending the month of March at Beverly Hills, California.

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Dr. Gunnar Gundersen, La Crosse, and Mr. J. G. Crownhart, Secretary, were speakers on the program of the Northwest Medical Conference held in St. Paul on Sunday, February 24th. Dr. Gundersen discussed the paper by Dr. D. J. Glomset of Des Moines on "Postgraduate Medical Education" and Mr. Crownhart discussed Dr. W. A. O'Brien's paper entitled "Scientific Exhibits."

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Dr. and Mrs. F. Gregory Connell, Oshkosh, are vacationing in California.

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Dr. and Mrs. Reginald H. Jackson of Madison are spending a short winter vacation in Mexico.

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Dr. J. A. Rawlins of Chicago has become associated with Dr. William A. Taylor of Portage.

BIRTHS

A son to Dr. and Mrs. L. B. Hansen, Stevens Point, on February 17th.

RADIO PROGRAM

Talks on health are broadcast over state stations WHA (Madison) and WLBL (Stevens Point) by the State Medical Society of Wisconsin each Tuesday, Wednesday and Thursday at 10:45 A. M. Schedule for the next month follows:

Tues.	March 12, 1935.	Unneighborly Diseases.
Wed.	March 13, 1935.	Whooping Cough.
Thur.	March 14, 1935.	The Heart in Childhood.
Tues.	March 19, 1935.	The Menace of Malnutrition.
Wed.	March 20, 1935.	Johnny Has a Cold.
Thur.	March 21, 1935.	Jack Has Scarlet Fever.
Tues.	March 26, 1935.	Childhood Emergencies.
Wed.	March 27, 1935.	High Blood Pressure.
Thur.	March 28, 1935.	Spring Tonics.
Tues.	April 2, 1935.	History of Tuberculosis.
Wed.	April 3, 1935.	The Family Doctor.
Thur.	April 4, 1935.	The Measly Measles.
Tues.	April 9, 1935.	The Nervous Breakdown.
Wed.	April 10, 1935.	Too Much Sugar.
Thur.	April 11, 1935.	Things Men Fear.

A son to Dr. and Mrs. Norbert Dettman, Milwaukee, on December 24th.

A son to Dr. and Mrs. S. L. Bornstein, Milwaukee, on January 9th.

A son to Dr. and Mrs. Edward Eisenberg, Milwaukee, on January 10th.

A son to Dr. and Mrs. M. W. Shutkin, Milwaukee, on January 16th.

ENGAGEMENTS

The engagement of Miss Virginia Carter, daughter of Dr. and Mrs. Ralph M. Carter of Green Bay to Calvin A. Elwood, Chicago, was announced in February. Mr. Elwood is the son of Mrs. Harriet Elwood and the late Dr. Calvin Elwood of Menominee, Michigan.

MARRIAGES

Dr. P. P. M. Jorgenson of Kenosha to Miss Edith Thompson of Wadsworth, Ill., on February 9th at Racine.

The marriage of Dr. Samuel E. Kohn, Milwaukee, and Miss Rita Goldman, Milwaukee, took place on January 10th.

Dr. E. F. Clothier, Westfield, to Miss Doris F. Haines of Portage on February 15th at Madison.

DEATHS

Dr. William A. Fulton, Burlington, died of pneumonia on January 26th.

Born at Hebron, Wisconsin, in 1868, Dr. Fulton earned most of his own way through high school and Whitewater Normal. After a year of teaching he entered Rush Medical College, from which he graduated in 1893, and came to Burlington directly thereafter. He assisted in establishing the first hospital in Burlington some twenty years ago. Early in 1928 Dr. Fulton was stricken with encephalitis from which he never fully recovered.

Dr. Fulton was a member of Racine County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow and one son, Robert, a student at the University of Wisconsin law school.

Dr. George F. Goggins, De Pere, died at his home on February 16th following a year's illness.

Dr. Goggins was born Sept. 27, 1885 at Chilton. He was a graduate of Marquette University School of Medicine in 1913. He practiced at Phelps, Tigerton, Wrightstown and Milwaukee before going to Green Bay in 1915 where he served as city physician for five years. Eight years ago he came to De Pere.

He is survived by his widow and six daughters.

Dr. Jacob Gomber, Goodman, died January 23rd.

He was born in Trenton, Washington county, Wisconsin on March 24, 1874. He was a graduate of Oshkosh Normal School and taught school for three years in Markesan where he served as principal for one year. He then attended the College of Physicians and Surgeons, Milwaukee, graduating in 1905. The same year he opened an office in Gillett, Wisconsin, where he practiced for fourteen years. On October 1, 1918, he came to Goodman where he remained until his death.

He is survived by his widow, two sons and two daughters.

Dr. W. V. Hausherr, Florence, died of pneumonia on January 22nd.

He was born in Detroit on December 29, 1871. He was a graduate of Michigan College of Medicine and Surgery, Detroit, in 1898. He came to Florence in 1901 to establish his practice where he remained for a year and a half. Following practice at Amasa, and Detroit, Michigan, and postgraduate work in Germany for a year, he returned to Florence to resume his practice.

Dr. F. J. Korthals, Milwaukee, died on February 4th after a long illness.

He was born in the year 1888 and was a graduate of Marquette School of Medicine in 1914. He served overseas with base hospital No. 109, attached to the French ambulance service.

Dr. Korthals was a member of the Medical Society of Milwaukee County, the State Medical Society, and the American Medical Association.

He is survived by his widow.

Dr. F. L. Leister, Lancaster, died at Rochester, Minnesota, where he had been for treatment for the past year.

Dr. Leister was born in the year 1869 and was a graduate of National University of Arts and Sciences Medical Department, St. Louis, in 1897. He had formerly practiced at Mt. Hope, Bloomington, Fennimore, Boscobel and Marshfield before going to Lancaster. He was a World War veteran.

He is survived by his widow and one son.

Dr. Emil B. Quade, Wausau, died on January 31st at his home after an illness of one day.

Dr. Quade was born in Wausau October 11, 1877. He was a graduate of Bennett College of Eclectic Medicine and Surgery, Chicago, in 1901 following which he practiced for two years in a private sanitarium in Chicago. In 1903 he returned to Wausau to establish his practice where he remained up to the time of his death.

He is survived by three daughters.

SOCIETY RECORDS

New Members

W. T. Becker, Mosinee.
H. B. Beeson, 209—8th St., Racine.
R. C. Morrison, Winnebago.
E. W. Schacht, 423 Main St., Racine.
Geo. W. Newell, Burlington.
E. D. Stanton, Reedsburg.
R. J. Portman, Antigo.
H. W. Virgin, Jr., 16 S. Henry St., Madison.
C. E. Zenner, Cadott.
Horace J. Hansen, Sheboygan Falls.
H. W. Kishpaugh, 400 E. Grand Ave., Beloit.
E. L. Bradbury, Neillsville.
L. L. Weissmiller, Albany.
Armand J. Quick, 208 E. Wis. Ave., Milwaukee.
Maurice Hardgrove, 208 E. Wis. Ave., Milwaukee.
E. D. Wilkinson, 5920 W. Burnham St., Milwaukee.
Morris Kretchmar, 3252 N. Green Bay Ave., Milwaukee.
O. L. Bergner, 3315 N. Green Bay Ave., Milwaukee.
Geo. C. Schulte, 625—57th St., Kenosha.
W. C. Kleinpell, 119 Monona Ave., Madison.
W. P. Curran, Antigo.
T. E. Farrell, Seneca.
Wallace S. Marshall, Irving Zuelke Bldg., Appleton.
John C. Frick, Waukesha.
R. P. Montgomery, 1300 University Ave., Madison.
Milton D. Davis, Milton.
E. J. McNulty, Adams.
A. E. Dillman, Wauzeka.
Bryce K. Ozanne, Neenah.
E. H. Tashkin, 2200 N. Third St., Milwaukee.
S. J. Hiller, 2703 N. 5th St., Milwaukee.

Change in Address

A. G. Kammer, Belleville to Montreal Mining Co., Montreal, Wis.

MEDICAL ECONOMICS

INSURANCE DIRECTORIES

From time to time physicians are advised by mail that they have been "selected" for the about-to-be-published insurance directory. Listing in such directories costs from $10 a year up to $50. The physician is told that the directory will be furnished all insurance companies to guide them in selecting their medical personnel.

Inquiries made of insurance company heads convince us that these directories receive little if any attention when received by the insurance companies. The companies know that the physician paid to have his name inserted and have no reliable means of knowing what care was exercised in compiling the directory. Secondly, insurance companies have their own means of ascertaining the standing of physicians and rely upon them.

DESTRUCTION OF RECORDS

We are advised that some physicians have been solicited to sell their old x-ray films and plates. This naturally raises the question of whether sale of such records, assuming identification symbols are destroyed, is a safe procedure.

In answer to one such inquiry, the Society pointed out that:

A. No record should be destroyed where a suit by the patient was either pending or might be commenced.

B. No record should be destroyed which affects a minor until six years after such minor becomes of age.

C. Certainly no record should be destroyed until two years has elapsed from the time that the patient was last seen.

Destruction of records is not a procedure to be entered into lightly, and particularly x-ray records.

INSURANCE FOR PHYSICIANS

Practically every month your State Society is forwarded material received by some member from an out-of-state insurance company. Frequently the policy offered is one for health and accident benefits. Again we warn the members to investigate before they purchase.

If the company is licensed to do business in Wisconsin by the Commissioner of Insurance, you have some assurance as to the standing and financial policies of the company. If the company is not so licensed by the state it may mean that it cannot meet the state's protective requirements and so resorts to direct-by-mail solicitation. One company recently investigated was found to have net assets of $500.

READ THE BULLETINS

Inquiries or complaints received by the State Society sometimes indicate that the member has failed to read a recent bulletin of the Society warning against the very procedure of which the member now complains. A bulletin to the members costs approximately $30 for postage and mailing alone with cost of printing to be added. When you receive a bulletin from your Society you can be certain that the matter it contains was deemed to have been of sufficient importance to warrant the expense. Bulletins are for your information and your protection, —read them carefully.

THE NORTHWEST CONFERENCE

Several years ago the officers of the Wisconsin, Minnesota, Iowa, North and South Dakota State Societies held an informal mid-winter conference at St. Paul to discuss mutual problems. This meeting has grown from year to year until it now embraces officers from Michigan to Colorado. The conference at St. Paul on Feb. 24th was attended by the Secretary, President, President-elect and Speaker of the House from Wisconsin.

Problems discussed at this meeting included Care of the Indigent, Sickness Insurance, Medical Journal Advertising, State Boards of Health, National Legislation, Basic Science Laws, Postgraduate Medical Education, Scientific Exhibits, and Commercial Exhibits.

NEW FIELDS FOR SOCIAL WORK

Under this title the February midmonth issue of "The Survey" comments on the new economic security program declaring in part, "It is pertinent for a journal devoted to social work and the social professions to visualize their place in the cast of characters.

"Whatever the division between federal and local maintenance of unemployment relief, and however large the new emergent employment projects or large the gains in industrial recovery, there is every prospect that there will be a long hangover of need to be met by skilled relief workers. At the same time social workers everywhere will be in demand for responsible tasks thrown open by the federal-aid measures—instituting and reinforcing the work of old-age pension bureaus, public-health and child-health activities, and the new programs for dependent and crippled children. *And with health insurance in the offing, physicians, nurses and social workers will take their places* in the new front line of defense and prevention against sickness."

Let's see—was it not the Committee on Economic Security that said that of course their plan would have no "intermediary agencies" between physician and patient? We will hazard the prediction that if sickness insurance ever does come that there will be a social worker for every physician in the program.

THE FOUNDATIONS

The publication of the Society "Sickness Insurance and the Propagandist Foundations" distributed to all members in January, has occasioned many calls for copies from without the state. Colorado, Minnesota, Maryland, and Indiana are among the states requesting reprints.

THIS PAGE

While the Wisconsin Medical Journal was a pioneer among Journals presenting informative material on social medical problems, the originators of this particular type of page were members of the Medical Economics Committee of the Minnesota Society. Do you like it?

RELIEF IN MINNESOTA

That the problems revolving around medical relief under the Federal Relief Administration are not peculiar to a given state was evidenced at a meeting of the Minnesota County Society officers held in late February. Complaints were voiced so generally in the meeting that one officer stated "we have to use ice packs to keep our temperature down".

During the long discussion it was evident that the active work of the County Advisory Committees and the Medical Advisor to the State Administrator had placed Wisconsin in a comparatively favorable position. Neither Minneapolis nor St. Paul has been permitted free choice of physician. An extreme shortage of funds was reported from all sections of Minnesota. One county reported that patients were taken into an adjoining county for tonsilectomies. Some counties have been given free choice only since last October. Some administrators were reported as demanding "paper work" that required more time than the call upon the patient.

It was also reported from various counties that relief officers were favoring one physician over others, and that county poor commissioners were dictating to the relief director who should and should not have relief. It was also brought out that in some instances lay relief directors were making their own determination, without consulting contact committees, how many calls were necessary in a given case.

Dr. W. A. Coventry, Duluth, President of the Minnesota State Medical Association, commended the Wisconsin system wherein Medical Advisory Committees were urged to meet monthly with the county relief director. He pointed out that many such directors were comparatively untrained and that as the local medical advisory committees met frequently to offer counsel and aid, so would the directors welcome their assistance and rely upon them for advice in all relief problems pertaining to medicine. He pointed out that such frequent contacts would be almost certain to eliminate that type of complaint wherein one officer stated that the local relief director had held that measles did not require more than the one original call; wherein the relief office dispensed patent medicines and where midwives were favored over physicians.

COUNCIL ACTIVITIES

That membership on the Council in Wisconsin requires constant effort was evidenced in Council activities during the third week in February. During just this one week, Councilors were requested to register their votes on the following questions:

1. Creation of a special committee on goiter prevention.
2. Introduction of four legislative measures respecting insanity suggested by the Special Committee on Mental Hygiene.
3. Attitude of the Society on the Groves' Interim Committee on costs of medical care bill.
4. Passing upon a request for a special appropriation from the surplus to bring economic studies to date for presentation to the legislature.
5. Attitude respecting an amendment to provide for the Medical Examiner system instead of the present system of county Coroners.
6. Attitude on a choice of physicians bill.

Passing upon these questions involved the study of ten pages, legal size, single spaced typewritten material relating the question, background, interviews, previous actions and probable effects.

MALPRACTICE AGAIN

Occasionally the first notice that a physician receives that a malpractice action is being instigated consists of a letter from an attorney relating that his client is dissatisfied and requested that the physician see the attorney "to avoid legal procedures". Members are again advised that such letters should be reported promptly to their insurance carriers and to the State Office when the member carries Medical Defense.

Holding interviews with legal counsel of plaintiffs without legal representation is extremely inadvisable and is generally cause for invalidation of protective insurance.

FROM MINNESOTA

"The writers of these columns regret if any comment made in the January issue (Minnesota Medicine) regarding the newspaper article which appeared concerning removal of school children's tonsils in Ashland, Wisconsin, caused any unfavorable reaction. The surgeons in charge, in Ashland, have pointed out to us that the operations were performed only after careful examinations over a long period of time and without any haste or anything suggestive of wholesale surgery. They have also pointed out that the work was done at the request of the Emergency Relief Administration and the fees charged were nominal under these circumstances.

"We wish, therefore, to retract any invidious comment, which was made from the information in the newspaper article alone and without careful investigation." Minnesota Medicine, February, 1935.

American Medical Association in Special Session Reaffirms Position Against Compulsory Sickness Insurance

DECLARING that regimentation of the medical profession and lay control of medical practice will be "fatal to medical progress and inevitably lower the quality of medical service now available to the American people," the House of Delegates of the American Medical Association unanimously voted to reaffirm its stand against compulsory sickness insurance. All three Wisconsin Delegates were present at this special session, the first since the World War, held at Chicago on Friday and Saturday, February 15th and 16th. Wisconsin's delegates were Drs. Joseph F. Smith, Wausau; J. Gurney Taylor, Milwaukee, and W. E. Bannen, La Crosse. Also present during the executive sessions were President T. J. O'Leary, Dr. Rock Sleyster, Wauwatosa, Trustee of the American Medical Association; Dr. Dexter F. Witte, member of the Committee on Public Policy and President of the Medical Society of Milwaukee County; Mr. Theodore Wiprud, Secretary of the Medical Society of Milwaukee County, and Mr. J. G. Crownhart, Secretary of the State Medical Society.

A day and a half of the two-day meeting was devoted to a general discussion of all economic questions with attention focused upon the President's Committee on Economic Security which is now studying in closed session a plan for federally subsidized compulsory sickness insurance to be instituted on a state-wide basis. To summarize the position of the Delegates, a special committee of the House was appointed consisting of the following delegates: Dr. Harry H. Wilson, Chairman, California; Dr. Warren F. Draper, Virginia; Dr. E. F. Cody, Massachusetts; Dr. E. H. Carey, Texas; Dr. N. B. Van Etten, New York; Dr. F. S. Crockett, Indiana and Dr. W. F. Braasch of Minnesota.

The statement of the reference committee adopted unanimously by the House of Delegates at its final afternoon session follows:

Your reference committee, believing that regimentation of the medical profession and lay control of medical practice will be fatal to medical progress and inevitably lower the quality of medical service now available to the American people, condemns unreservedly all propaganda, legislation or political manipulation leading to these ends.

Your reference committee has given careful consideration to the record by the Board of Trustees of the previous actions of this House of Delegates concerning sickness insurance and organized medical care and to the account of the measures taken by the Board of Trustees and the officials of the Association to present this point of view to the government and to the people.

The American Medical Association, embracing in its membership some 100,000 of the physicians of the United States, is by far the largest medical organization in this country. The House of Delegates would point out that the American Medical Association is the only medical organization open to all reputable physicians and established on truly democratic principles, and that this House of Delegates, as constituted, is the only body truly representative of the medical profession.

The House of Delegates commends the Board of Trustees and the officers of the Association for their efforts in presenting correctly, maintaining and promoting the policies and principles, heretofore established by this body.

The primary considerations of the physicians constituting the American Medical Association are the welfare of the people, the preservation of their health and their care in sickness, the advancement of medical science, the improvement of medical care, and the provision of adequate medical service to all the people. These physicians are the only body in the United States qualified by experience and training to guide and suitably control plans for the provision of medical care. The fact that the quality of medical service to the people of the United States today is better than that of any other country in the world is evidence of the extent to which the American medical profession has fulfilled its obligations.

The House of Delegates of the American Medical Association reaffirms its opposition to all forms of compulsory sickness insurance whether administered by the Federal government, the governments of the individual states or by any individual industry, community or similar body. It reaffirms, also, its encouragement to local medical organizations to establish plans for the provision of adequate medical service for all of the people, adjusted to present economic conditions, by voluntary budgeting to meet the costs of illness.

The medical profession has given of its utmost to the American people, not only in this but in every previous emergency. It has never required compul-

sion but has always volunteered its services in anticipation of their need.

The Committee on Economic Security, appointed by the President of the United States, presented in a preliminary report to Congress on January 17 eleven principles which that Committee considered fundamental to a proposed plan of compulsory health insurance. The House of Delegates is glad to recognize that some of the fundamental considerations for an adequate, reliable and safe medical service established by the medical profession through years of experience in medical practice are found by the Committee to be essential to its own plans.

However, so many inconsistencies and incompatabilities are apparent in the report of the President's Committee on Economic Security thus far presented that many more facts and details are necessary for a proper consideration.

The House of Delegates recognizes the necessity under conditions of emergency for federal aid in meeting basic needs of the indigent; it deprecates, however, any provision whereby federal subsidies for medical services are administered and controlled by a lay bureau. While the desirability of adequate medical service for crippled children and for the preservation of child and maternal health is beyond question, the House of Delegates deplores and protests those sections of the Wagner Bill which place in the Children's Bureau of the Department of Labor the responsibility for the administration of funds for these purposes.

The House of Delegates condemns as pernicious that section of the Wagner Bill which creates a social insurance board without specification of the character of its personnel to administer functions essentially medical in character and demanding technical knowledge not available to those without medical training.

The so-called Epstein Bill, proposed by the American Association for Social Security now being promoted with propaganda in the individual states, is a vicious, deceptive, dangerous and demoralizing measure. An analysis of this proposed law has been published by the American Medical Association. It introduces such hazardous principles as multiple taxation, inordinate costs, extravagant administration and an inevitable trend toward social and financial bankruptcy.

The committee has studied this matter from a broad standpoint, considering many plans submitted by the Bureau of Medical Economics as well as those conveyed in resolutions from the floor of the House of Delegates. It reiterates the fact that there is no model plan which is a cure-all for the social ills any more than there is a panacea for the physical ills that affect mankind. There are now more than 150 plans for medical service undergoing study and trial in various communities in the United States. Your Bureau of Medical Economics has studied these plans and is now ready and willing to advise medical societies in the creation and operation of such plans. The plans developed by the Bureau of Medical Economics will serve the people of the community in the prevention of disease, the maintenance of health and with curative care in illness. They must at the same time meet apparent economic factors and protect the public welfare by safeguarding to the medical profession the functions of control of medical standards and the continued advancement of medical educational requirements. They must not destroy that initiative which is vital to the highest type of medical service.

In the establishment of all such plans, county medical societies must be guided by the ten fundamental principles adopted by this House of Delegates at the annual session in June 1934. The House of Delegates would again emphasize particularly the necessity for separate provision for hospital facilities and the physician's services. Payment for medical service, whether by prepayment plans, installment purchase or so-called voluntary hospital insurance plans, must hold, as absolutely distinct, remuneration for hospital care on the one hand and the individual, personal, scientific ministrations of the physician on the other.

Your Reference Committee Suggests that the Board of Trustees request the Bureau of Medical Economics to study further the plans now existing and such as may develop, with special reference to the way in which they meet the needs of their communities, to the costs of operation, to the quality of service rendered, the effects of such service on the medical profession, the applicability to rural, village, urban and industrial population, and to develop for presentation at the meeting of the American Medical Association in June model skeleton plans adapted to the needs of populations of various types.

(Signed) Dr. Harry H. Wilson, California, *Chairman.*
Dr. Warren F. Draper, Virginia.
Dr. E. F. Cody, Massachusetts.
Dr. E. H. Carey, Texas.
Dr. N. B. Van Etten, New York.
Dr. F. S. Crockett, Indiana.
Dr. W. F. Braasch, Minnesota.

AIDING AN ABORTION

That a physician who directs a patient seeking an abortion to another for such purpose may have his license revoked, was the opinion of the Attorney General forwarded to the State Board of Medical Examiners late in February. The Attorney General pointed out that one of the causes of revocation of license was "procuring, aiding or abetting a criminal abortion" and that a physician who sent a patient to another for the purpose of procuring an abortion was an accessory before the fact even though not present at the operation.

Physicians were reminded that when called to attend one who has been aborted, consultation with preferably two other physicians is required prior to necessary treatment.

Legislative Proposal to Investigate Costs of Medical Care Introduced: Over 600 Measures Pending

AT THE end of the second month of the Wisconsin Legislature, over 600 bills had been introduced and upwards of 200 of these measures were yet to be printed. Among measures affecting the public health are to be found bills creating an interim committee of the Legislature to investigate costs of medical care, two anti-vivisection bills, several corrective measures introduced by request of the State Board of Health, a measure calling for absolute free choice of physician under all conditions, and others.

It is also understood that among the measures yet to be printed is one to create a board of examiners in "naturopathy" and to license "naturopaths"; one or more broadening the scope of practice of chiropractors, and possibly one or more on sickness insurance.

Membership on the Senate Committee on Education and Public Welfare and the Assembly Committee on Public Welfare (committees which will hold public hearings on practically all public health measures) follow:

The Senate Committee on Education and Public Welfare

Senator Philip E. Nelson, Maple, (Douglas County) Chairman; Senator M. K. Kelly, Fond du Lac, Senator Chester E. Dempsey, Hartland, Senator Earl Leverich, Sparta, and Senator R. E. Kannenberg, Wausau.

Assembly Committee on Public Welfare

Assemblyman Marius Dueholm, Luck (Polk County) Chairman; Vernon W. Thomson, Richland Center, John Mulder, La Crosse, Herman L. Kronschnabl, Crandon, Theodore Swanson, Ellsworth, Otto A. Vogel, Manitowoc, and Robert Lynch, Green Bay.

The following legislative report is concerned with bills introduced to March first.

Anti-Vivisection

Bill 226, A (Assembly) introduced by Assemblyman O'Malley, Milwaukee. This bill defines what is meant by a "pound" and prohibits pound masters from permitting any live animal in his custody being used for experimental or commercial purposes including "educational demonstration, medical, scientific, or experimental purposes of any nature." Because this bill relates to pounds, it has been referred to the Committee on Municipalities of the Assembly. This Committee is composed of the following members:

Assemblymen Byrd M. Vaughan, Wisconsin Rapids, Chairman; Ira Inman, Beloit, A. W. Laabs, Appleton, Ray Novotny, Oshkosh, Tom Lomsdahl, Osseo, Adam F. Poltl, Hartford, Geo. J. Woerth, Sauk City, John W. Grobschmidt, South Milwaukee, Herbert C. Schenk, Madison, Mary O. Kryszak, Milwaukee, and E. F. Rakow, Burlington.

Bill 160, S (Senate) A second bill prohibiting any operation or experiment upon living dogs except for the purpose of healing or curing such dogs. This bill was introduced by the Committee on Education and Public Welfare and has been referred back to the Senate Committee on Education and Public Welfare for its hearing. Note that the Senate bill refers only to dogs while the Assembly bill is a far broader measure. It is understood that both measures are supported by the Wisconsin Anti-Vivisection Society.

Costs of Medical Care

Bill 137, S (Senate) introduced by Senator Harold M. Groves, Madison. This bill appropriates the sum of $3,000 for use of a special interim committee of the legislature to investigate the subject of the costs of medical care and "the ways and means of lightening the burden thereof." The Committee as constituted in the bill would consist of two Senators, appointed by the Lieutenant Governor; three Assemblymen appointed by the Speaker of the House, and two citizens, appointed by the Governor. The Committee would meet immediately upon adjournment of the present legislative session and report its findings and recommendations to the 1937 session of the legislature or "if it is prepared to do so, at any intervening special session that may be called." All state departments, including the Legislative Reference Library, the State Board of Health, and the University, "shall assist the Committee in making any studies which it may desire to have made" and the Committee is authorized to cooperate "with any Committee of Congress or other federal agency which may be interested in the same problem or with any similar committee appointed in any other state."

This bill is to have its first hearing before the Senate Committee on Education and Public Welfare. No date for the hearing has been announced. By a vote of the Council, it is the position of the State Medical Society that assuming the Committee named under the terms of the bill will seek a full presentation of the subject matter and that the Committee members will have no preconceived judgments in the

matter, there is no unwillingness of the Society to have such an investigation upon the theories and along the lines indicated. It is the intention of the Society to outline to the Senate Committee on Education and Public Welfare the broad scope of this subject and the necessity for having a long and most complete hearing if the true purpose of the measure is to be accomplished.

Free Choice of Physician

Bill 88, A (Assembly) by Assemblyman Joseph L. Barber (M. D.) of Marathon (Marathon County). This bill provides a penalty for violation of the following new section which it adds to the statutes:

"Section 1. A new section is added to the statutes to read: 348.53 Influencing Choice of Physicians or Surgeons. (1) No relief agency, relief worker, agent or representative of a relief agency, employer of any injured or sick person, agent of such employer, insurance company or agent or representative of an insurance company shall influence, induce or persuade or attempt to influence, induce or persuade an injured or sick person to engage for attendance upon him in a professional character any physician or surgeon or to change from a physician or surgeon engaged for attendance upon him to another."

Administration of Silver Nitrate

Bill 70, A (Assembly) introduced by Assemblyman Barber at the request of the State Board of Health. The former law provided that the silver nitrate shall be distributed free to local health officers in quantities sufficient to enable delivery to each physician and midwife. Upon the arrest of several individuals, both physicians and midwives, who had failed to use the silver nitrate, they were able to prove in court that they had never been supplied by local health officers as the law provided and, therefore, a conviction was impossible.

The present bill provides that the silver nitrate shall be distributed from the State Board direct to local health officers, physicians and midwives and not be distributed by health officers. The bill further provides that every physician and midwife attendant upon a confinement case shall drop a 1 per cent solution of nitrate of silver into the eyes of a newborn child immediately after birth and does not confine the physician to the use of the said solution distributed by the board as the former law did.

Quarantine

Bill 10, A (Assembly) introduced by Assemblyman Trego by request of Gust L. Peterson, a member of the Lincoln County Board. This bill provides that each physician shall quarantine and post his own placards reporting his action to the local health officer rather than reporting the matter for quarantine to the health officer and having the health officer place the actual placard as the law now provides. Physicians would be furnished with the necessary placards by the health officer. This bill has had its Assembly hearing and the reason advanced for its introduction was economy. The measure was opposed by representatives of the State Board of Health and is still resting in the Assembly Committee on Public Welfare which has made no recommendation to this time.

This bill was killed Feb. 28th.

State Aid For County Public Health Nurses

Bill 100, A (Assembly) introduced by Assemblyman Hugh Harper, Lancaster. This bill is a State Board of Health measure proposing state aid of $1,000 annually to each county in which one or more certified public health nurses are employed. The bill has been referred to the Committee on Public Welfare and has had its Assembly hearing on February 19th.

Care of the Indigent

Bill 149, A (Assembly) by Assemblyman Sieb, Racine. This bill prohibits the use of the word "pauper" by any person or agency assisting in administering relief when referring to any person receiving aid because of inability to find employment. This bill was heard by the Assembly Committee on Public Welfare the week of February 25th.

Birth Certificates

Bill 171, A (Assembly) introduced by Assemblywoman Mary O. Kryszak, Milwaukee. This bill amends the law to provide that the certificate for an illegitimate child may be filed direct with the State Board of Health and such certificate shall be kept in a separate file not subject to public inspection. It also provides that all charges for professional services rendered by a person in attendance at birth to be unlawful unless the birth certificate is properly filled out and reported to the State Board of Health direct. This bill has had a hearing before the Assembly Committee on Public Welfare and was introduced by request of the State Board of Health who declared its purpose to be the closing of these records to unnecessary inspection by the public locally.

Tests for Intoxication

Bill 188, A (Assembly) by Assemblyman Barber (Marathon County). This bill proposes to create a new section making it the duty of any police officer who has in his custody or care a person whom he has reasonable cause to believe is under the influence of an intoxicant, and who has recently injured himself or the person or property of another, to obtain from such person a sample of his blood or urine if the same can be obtained with the person's consent or "without his objection." Such sample shall then be tested for the determination of alcoholic content and finding is to be available for use in civil actions. No fee shall be charged for making such test in excess of $3.00.

This bill was killed by the Assembly on March 1st.

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Anti-Nuptial Physical Examination

Bill 195, A (Assembly) by Assemblyman Franzkowiak, Milwaukee, proposes to repeal the statute requiring the anti-nuptial physical examinations for men. This bill has been referred to the Assembly Committee on Public Welfare.

It is understood that a second bill is to be introduced from another source to provide that both men and women shall be subject to such examination.

Chiropody

Bill 214, A (Assembly) introduced by Assemblyman Murray of Milwaukee. This bill has the following provisions:

1. Requires one year in a recognized college of liberal arts or sciences in addition to graduation from an accredited high school, this provision to be effective after July 1, 1940.
2. Raises course requirements in chiropody schools from two years of thirty-seven weeks of thirty class hours each, to three years.
3. Provides that applicants for registration in Wisconsin shall submit to a clinical as well as the present oral examination.
4. Provides for three chiropodists instead of one to conduct examinations under the State Board of Medical Examiners.
5. Provides for a $2.00 annual registration fee.
6. Adds to the provisions under which a certificate of registration may be revoked, many additional acts of unprofessional conduct.

County Health Departments

Bill 159, S (Senate) introduced through Senate Committee on Education and Public Welfare provides for jurisdiction of a county department of health when organized under the present permissive law so as to provide that any city employing a full time health officer which determines to remain outside of the County Health Department jurisdiction may do so. It also provides that any municipality which does not employ a full time health officer may abolish its local board of health or may limit it for the purpose of employing public health nurses, sanitary inspectors and other persons. The real purpose of this is to revise the present permissive law into a more workable form.

Naturopaths

While no bill has been introduced to this date, four Milwaukee citizens have registered as representing the Wisconsin Naturopathic Association and it is understood that they will lobby for the creation of a Naturopathic Board of Examiners. Those registered from Milwaukee are: William J. Rossold, J. B. Herr, E. De Loss Argraves and Roland J. Steinle.

Chiropractors

Attorney Howard J. Lowry, Madison, is registered as legislative counsel for the Wisconsin Chiropractic Association. It is understood that more than one chiropractic bill will be introduced in this legislative session.

Commitment of the Insane

Bill 123, S (Senate) introduced by Senator Ingram of Eau Claire. This bill re-creates certain sections of the present law relating to commitment of the insane. Among other provisions it includes the following: (1) In examinations of the alleged insane person, the duty is placed upon the physician examining, instead of the Judge, to "give notice to the person to be examined that application has been made for an inquiry into his mental condition," unless such notice would be injurious to the person, in which case they must advise the court to that effect and their reasons for withholding the records. A further report on this measure will be made in our next bulletin. This bill has been referred to the Senate Committee on Judiciary.

Malpractice in Compensation Cases

Bill 168, S (Senate) introduced by Senator Ingram of Eau Claire. Under the Workmen's Compensation Act as it now stands, if the physician is sued for malpractice by an injured employee who receives compensation for his injury, and if the plaintiff wins his malpractice suit, the measure of damages shall be the amount of damages found by the jury less the compensation payable to the employee. Under the present bill the compensation received by the employee would not be an element in the measure of damage for malpractice.

Physicians' Reports in Compensation Cases

Bill 169, S (Senate) introduced by Senator Ingram of Eau Claire. Under the present law any physician who attends an employee may be required to testify before the Commission "when it shall so designate." This bill provides further that "in all cases where the employee is treated or examined by a physician or surgeon engaged by the employer, it shall be the duty of such physician or surgeon to deliver to the employee or his representative a statement in writing setting forth all of the information obtained in such treatment or examination to the same extent that such physician or surgeon reports to the employer." It also provides that if the physician fails to do so he may not testify at any hearing held on the claim and any information obtained by such physician may not be used by the Commission. The bill further provides that the statement shall be sent to the employee or his representative at the same time the physician reports to the employer. This bill has been referred to the Committee on Judiciary of the Senate.

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Prenatal Injuries

Bill 285, A (Assembly) by Assemblyman O'Malley, Milwaukee. This bill in substance is that killed two years ago in the Assembly. It provides that whenever a child is so far advanced in prenatal age that should it be born and could live separable from the mother, the right of action shall exist in the child's favor for any "injury wantonly or negligently inflicted upon his person at such an age of violability." The bill also creates the right of action in favor of its personal representative or any other person sustaining damage because of injury or death to the child.

The Society opposed the bill two years ago on the grounds that it created in the physician attending the mother a duty equally as high respecting the child and that these two duties might well conflict and thus involve the physician in a malpractice suit as late as twenty-three years thereafter. This bill has been referred to the Committee on Judiciary of the Assembly.

Members of the Judiciary Committee of the Assembly are: Assemblymen Olson, Chairman, Osh-Kosh; Nehs, Neillsville; Vaughan, Wisconsin Rapids; Young, Milwaukee; Cavanaugh, Antigo; Alfonsi, Pence; Sigman, Two Rivers; R. W. Peterson, Berlin, and Weissleder, Milwaukee.

Uniform Narcotic Law

Bill 262, A (Assembly) is in substance the uniform narcotic law. This bill will have its first hearing before the Assembly Judiciary Committee on Wednesday, March 6th. Legal counsel of the Society is now studying the bill.

Medical Grievance Committee

Bill 267, A (Assembly) by Assemblyman Groves, Lodi, introduced by request of the State Medical Society of Wisconsin. This bill creates a medical grievance committee composed of the Attorney General or his deputy, the State Health Officer, and the Secretary of the State Board of Medical Examiners. The purpose of the bill is to provide a method for correction of improper practices, preferably without publicity, and thus to avoid necessity for revocation of license. The bill will have its public hearing before the Assembly Committee on Public Welfare on Tuesday, March 5th. Members of this Committee are: Assemblymen Dueholm, Polk County, Chairman; Thomson, Richland Center; Vogel, Manitowoc; Swanson, Pierce County; Kronschnabl, Crandon; Mulder, La Crosse, and Lynch, Green Bay.

Smallpox Vaccination

Bill 257, A (Assembly) by Assemblywoman Kryszak, Milwaukee, by request of the State Board of Health. This bill makes it possible for local authorities to use school funds to vaccinate all school children in face of an epidemic without reference as to the residence of the child. The bill will have its public hearing before the Assembly Committee on Public Welfare on Tuesday, March 5th.

Compulsory Auto Insurance

Bill 176, S (Senate) by Senator Severson of Iola. This bill has been referred to the Senate Committee on Corporation and Taxation composed of Senators Morris, Milwaukee; Bolens, Sheboygan; Callan, Milwaukee; Ingram, Eau Claire, and Groves, Madison. The bill requires insurance or bond prior to licensing in the amount of $1,000. No date has been set for a hearing.

Dentistry

Bill 296, A (Assembly) by Assemblyman Young, Milwaukee. This bill raises the annual reregistration fee from $1.00 to $2.00 and amends the new law (1933) referring to signs and advertising to conform with certain suggestions contained in a supreme court decision a few months ago. No date has been set for hearing. The bill is supported by the State Dental Society and the State Board of Dental Examiners.

Free Choice of Physician

Bill 88, A (Assembly) by Assemblyman Barber (M. D.) of Marathon. This bill reported in our last bulletin provides a penalty for any relief agent, insurer, or other official who attempts to influence an injured or sick person engaging any specific physician or surgeon. This bill has had its hearing before the Assembly Committee on Public Welfare but has not been reported. The bill was opposed by Mr. Stanley C. Perry, Milwaukee County representative, and Mr. Frank Metcalfe of the Milwaukee County Board of Supervisors. Both claimed that it would prevent city officials from sending injured county employees to the county hospital. This bill is resting in Committee awaiting a proposed amendment.

Administration of Silver Nitrate

Bill 70, A (Assembly) introduced by Assemblyman Barber (M. D.) of Marathon, at the request of the State Board of Health. This bill broadening the duties of the State Board of Health in the furnishing of silver nitrate direct to physicians was recommended for passage by the Assembly Committee on Public Welfare and has been advanced in the Assembly. The bill will be up for final passage in the Assembly probably the second week in March.

Chiropody

Bill 241, A (Assembly) introduced by Assemblyman Murray of Milwaukee. This bill reported in the bulletin of February 22nd, had its hearing before the Assembly Committee on Public Welfare the last week in February. The bill raises requirements for chiropodists and broadens the provisions under which registration may be revoked. Introduced at the request of the Wisconsin Chiropodist Society, the bill was supported by the State Medical Society. The Assembly will probably vote on the bill during the second or third week in March.

(Continued on page 214)

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Senate and Assembly Bills Would Create Interim Committee on Cost of Medical Care

IDENTICAL bills in both houses of the Wisconsin legislature by Senator Harold Groves, Madison, and Assemblyman Sigman, Two Rivers, would create an interim committee to investigate the "general subject of the cost of medical care." The Senate bill is number 137, S and the Assembly bill is number 297, A. Both bills were to have public hearings during the first week of March and each provides an appropriation of $3,000 for the purpose of making the interim study.

The provisions of the Groves–Sigman bills follow:

SECTION 1. There is created an interim committee on the cost of medical care to consist of two senators and three asemblymen who shall be appointed by the presiding officers of the respective houses and of two citizens to be appointed by the governor.

SECTION 2. Said committee shall investigate the general subject of cost of medical care and the ways and means of lightening the burden thereof. To this end, it may cooperate with any committee of congress or other federal agency which may be interested in the same problem or with any similar committee appointed in any other state. The mention of specific lines of inquiry shall not be deemed a limitation, but the committee shall have authority to inquire into such phases of the general subject of cost of medical care as it may deem advisable to investigate.

SECTION 3. The committee shall begin its investigations as soon as possible after the adjournment of the present session of the legislature and shall report its findings and recommendations to the 1937 session of the legislature, or, if it is prepared to do so, at any intervening special session that may be called. With its report the committee shall submit drafts of bills to carry out its recommendations.

SECTION 4. The members of the committee shall receive no compensation for their services but shall be reimbursed their actual and necessary expenses. The committee may employ such stenographic and other assistants as it deems necessary and shall have authority to fix their compensation. For these purposes and the printing of its report, there is appropriated from the general fund to the committee herein created the sum of three thousand dollars. Expenditures from this appropriation shall be made on vouchers approved by the chairman or acting chairman and secretary of the committee.

SECTION 5. All state departments, and particularly the legislative reference library, the state board of health and the university, shall assist the committee in making any studies which it may desire to have made. All state departments and the officers of all political subdivisions of the state shall furnish to the committee any information it may require.

SECTION 6. Said committee shall hold such meetings at such times and in such places as it may deem advisable. Any member shall have the power to administer oaths to persons testifying before the committee. By subpoena, issued over the signature of its chairman or acting chairman, and served in the manner in which circuit court subpoenas are served, it may summon and compel the attendance of witnesses, and the production of all books, papers, documents, and records necessary or convenient to be examined and used by them in their investigation. If any witness, subpoenaed to appear before said committee, shall refuse to appear or to answer inquiries propounded, or shall fail or refuse to produce books, papers, documents, or records within his control, when the same are demanded, the committee shall report the facts to the circuit court of Dane county, and it shall be the duty of such court to compel obedience to the committee's subpoena by attachment proceedings for contempt as in the case of disobedience of the requirements of a subpoena issued from such court or a refusal to testify therein.

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—Proc. Soc. Exp. Biol. and Med., 1934, **32**, 241-245.

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* "Pharmacology of Inflammation: III. Influence of Hygroscopic Agents on Irritation from Cigarette Smoke," as reprinted from Proc. Soc. Exp. Biol. and Med., 1934, **32**, 241-245. ☐

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Professional Service by Oculists Does Not Fall Under Optical Retail Code Authority

OCULISTS throughout Wisconsin were receiving early in March a demand to contribute to the financial budget of the Optical Retail Code Authority. Immediate investigation resulted in an opinion by Dr. W. C. Woodward, director of the Bureau of Legal Medicine and Legislation of the American Medical Association, that oculists who made no profit on the sale of ophthalmic products but merely charged for professional services, did not fall under the code.

The opinion of the Bureau follows:

"The Code of Fair Competition for the Optical Retail Trade, approved by President Roosevelt, June 4, 1934, provides, in paragraph 1, Article II, that the term 'Optical Retail Trade' shall include:

" 'the retail distribution in individual units or small quantities to the ultimate consumer of eyeglasses, spectacles, oxfords, lorgnettes, and all other ophthalmic frames, mountings and accessories, all ophthalmic lenses, eyeglasses and spectacle cases, parts, sunglasses when fitted with ophthalmic lenses, industrial goggles and eye protectors when fitted with ophthalmic lenses, and fitting, repairing, adjusting and otherwise servicing of eye-wear and ophthalmic products of all kinds, and the servicing of prescriptions to the ultimate consumer, with respect to the foregoing products, and such related branches or subdivisions as may from time to time be included under the provisions of this Code. For the purpose of effectuating this Code the foregoing definition shall embrace and include every and all persons engaged in the retail distribution to the ultimate consumer of the foregoing products or the servicing thereof.'

"Clearly, the activities of a physician who prescribes for his patients, sends the prescriptions elsewhere to be filled and to be delivered to him, and checks the accuracy of the finished product and the fit on the patient before turning the product over to the patient, *making on the whole transaction no profit on the sale of the ophthalmic product but merely charging for his professional services* in prescribing for his patient, and seeing that the prescription is accurately filled and fits the patient, are not embraced within the definition above. Such a physician is not amenable to the code.

"On the other hand, if a physician engages in the sale of spectacles, eyeglasses, and optical goods, whether prescribed by himself or by someone else, he obviously brings himself within the purview of the optical retail trade code.

"That a physician who merely prescribes lenses for his patients but does not profit financially from the sale of the eyeglasses was not intended to be embraced by the Optical Retail Code seems further evident from the fact that Article VI of the Code, in providing for the organization of a Code Authority makes no provision for representation of such a physician on the Code Authority. Paragraph 1, Article VI, of the Optical Retail Code provides, in part, that the Code Authority shall consist of 14 persons:

" 'four (4) of whom shall be members of the Guild of Prescription Opticians of America, Inc.; four (4) shall be members of the American Optometric Association; four (4) shall be members of the Better Vision Institute, two (2) of whom shall be Retail members of the Institute and Opticians, and two (2) of whom shall be Retail members of the Institute and Optometrists; and two (2) of whom shall be selected from members of the Trade, who are not members of any Association, one (1) of whom shall be an optometrist and one (1) an optician.'

"The personnel of the Code Authority, as above provided, seems clearly indicative of the intent to exclude from the provisions of the Code the ordinary activities of oculists. If it had been intended to embrace within the purview of the Optical Retail Code the normal professional activities of oculists, it is not unreasonable to assume that some provision would have been made to accord them representation on the Code Authority."

A. C. S. AT ST. PAUL MARCH 15–16

The American College of Surgeons of the North Central Section composed of Minnesota, Wisconsin, North Dakota, South Dakota and Manitoba, Canada will hold a two day conference Friday, March 15th and Saturday, March 16th, at the Lowry Hotel, St. Paul, Minnesota, and on Sunday afternoon, March 17th, a community health meeting will be held which will be open to the public at the St. Paul Auditorium at 3 P. M.

The Public Health meeting constitutes an important part of the College's program to assist in the movement for better health and better hospitals. It consists of a series of twelve to fifteen minute talks on health, scientific medicine and hospitals, illustrated in the most part by lantern slides and motion pictures.

During the two-day conference the schedule of meetings are as follows:

Friday, March 15th

9:00 A. M. to 12 M.	Clinics
9:00 A. M. to 12 M.	Hospital Conference
12:30 P. M. to 2:00 P. M.	Medical Motion Pictures
2:30 P. M. to 5:00 P. M.	Hospital Conference
7.00 P. M. to 8:00 P. M.	Medical Motion Pictures

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8:00 P. M. to 10.30 P. M._____Scientific meeting, General Surgery
8:00 P. M. to 10:30 P. M._____Scientific meeting, Eye, Ear, Nose and Throat Surgery

Saturday, March 16th

9:00 A. M. to 12 M. _____ Clinics
9:00 A. M. to 12 M. _____Hospital Conference
12:30 P. M. to 2:00 P. M._Medical Motion Pictures
2:30 P. M. to 5:30 P. M._____Scientific meeting, General Surgery
2:30 P. M. to 5:30 P. M._____Scientific meeting, Eye, Ear, Nose and Throat Surgery
2:30 P. M. to 5:00 P. M._____Hospital Conference

The clinics will be arranged at local hospitals and the most interesting and instructive cases will be worked up and interestingly presented. The hospital sessions will run simultaneously with the Clinic and Scientific meetings and during the first day will consist of medical nursing and economic problems relating to hospital administration. In the afternoon the conference will deal particularly with medical problems of special interest to members of the medical profession. The hospital sessions will consist of round table conferences and demonstrations at the local hospitals. The meetings will be of special interest to hospital trustees, administrators, members of the medical staff, nurses and others.

All of the scientific programs and clinics are open to all regular members of the medical profession whether or not they are members of the American College of Surgeons.

The committee on Local Arrangements of St. Paul consist of the following:

Dr. Wallace Cole, Chairman
Dr. E. M. Jones, Secretary
Dr. Fred Schulte
Dr. O. W. Holcomb
Dr. W. C. Carroll
Dr. George Earl

DR. McGONIGLE APPOINTED

Dr. Bart E. McGonigle of Ableman has been appointed to the State Board of Medical Examiners to succeed Dr. H. P. Bowen of Watertown who was unable to accept the appointment tendered him by Governor Schmedeman just prior to the first of the year. Dr. McGonigle's term runs to July 1, 1937.

THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

Aids to Psychiatry. By W. S. Dawson, M.D., professor of psychiatry, University of Sydney; Late senior assistant medical officer, Maudsley Hospital for Nervous Diseases, London. Third edition. William Wood & Company, Baltimore.

Aids to Embryology. By Richard H. Hunter, M.D., lecturer in anatomy, Queen's University, Belfast. Second edition. William Wood and Company, Baltimore.

Report on Seventh International Congress of Military Medicine and Pharmacy and Meetings of the Permanent Committee. Madrid, Spain, May 29–June 3, 1933. By Capt. William S. Bainbridge, delegate from the United States.

Stammering and Allied Disorders. By C. S. Bluemel, M.D., (Eng.). The Macmillan Company, New York, 1935.

One Hundred and Fifty Years of Publishing. By Lea and Febiger, Philadelphia, Pa.

Diabetes Mellitus and Obesity. By Garfield G. Duncan, M.D., associate in medicine in the Jefferson Medical College, Philadelphia. Lea and Febiger, Philadelphia, 1935. Price $2.75.

The Crippled and The Disabled. By Henry H. Kessler. Columbia University Press, New York, 1935.

Bee Venom Therapy. By Bodog F. Beck, M.D. D. Appleton–Century Company, New York.

Human Anatomy. First Dissection. By Dudley J. Morton, associate professor of anatomy, College of Physicians and Surgeons, Columbia University.

Human Anatomy. Second Dissection. By Dudley J. Morton, associate professor of anatomy, College of Physicians and Surgeons, Columbia University. Columbia University Press, New York, 1934.

The Safe Period. By William J. Robinson, M.D. Eugenics Publishing Company, New York.

Hughes' Practice of Medicine. Revised and edited by Burgess Gordon, M. D., associate professor of medicine, Jefferson Medical College. 15th edition. P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia. Price $5.00.

Medical Clinics of North America. Issued serially, one number every other month. Vol. 18, number 3. New York Number—November 1934. Paper $12.00, Cloth $16.00 net. W. B. Saunders Co., Philadelphia.

The Patient and the Weather. By William F. Petersen, M. D. Volume II. Price $6.50. Edwards Brothers, Inc., Ann Arbor, Michigan.

The 1934 Year Book of Obstetrics and Gynecology. The Year Book Publishers, 304 South Dearborn St., Chicago.

Diseases of the Mouth and Their Treatment. By Hermann Prinz, D. D. S., and S. S. Greenbaum, M. D., associate professor of dermatology and syphilology in the Graduate School of Medicine of the University

PHYSICIANS' EXCHANGE

Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

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WANTED—Young physician wishes to affiliate with elderly practitioner. Best references. Address No. 963 in care of the Journal. J.

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Pharmaceutical Manufacturers

Hynson, Westcott & Dunning, Inc., Baltimore, Md.

Eli Lilly & Co., Indianapolis, Ind.

Merck & Co., Inc., Rahway, N. J.

Parke, Davis & Co., Detroit, Mich.

Petrolagar Laboratories, Inc., 8134 McCormick Blvd., Chicago

Smith-Dorsey Co., Lincoln, Neb.

E. R. Squibb & Sons, New York, N. Y.

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Postgraduate Courses

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The Spa, Waukesha, Wis.

Sanitariums—Nervous and Mental

Kenilworth Sanitarium, Kenilworth, Ill.

Milwaukee Sanitarium, Wauwatosa, Wis.

North Shore Health Resort, Winnetka, Ill.

Oconomowoc Health Resort, Oconomowoc, Wis.

Sacred Heart Sanitarium, Milwaukee, Wis.

St. Croixdale, Prescott, Wis.

Shorewood Hospital-Sanitarium, Shorewood, Milwaukee, Wis.

The Summit Hospital, Oconomowoc, Wis.

Waukesha Springs Sanitarium, Waukesha, Wis.

Sanatorium

River Pines Sanatorium, Stevens Point, Wis.

Support Manufacturers

S. H. Camp & Co., Jackson, Mich.

Katherine L. Storm, M.D., 1701 Diamond St., Philadelphia, Pa.

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Courses in nursing are offered in the School of Nursing affiliated with the medical school. A residential course of 27 months is offered in the Wisconsin General Hospital to those who have completed a year of specified work in the College of Letters and Science. This course leads to a certificate of graduate nurse. A residential course of 27 months is offered to those who have completed three years of college work in specified subjects either in the College of Letters and Science or in the Department of Home Economics. These courses lead to a certificate of graduate nurse and to a B. S. degree.

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IN THIS ISSUE

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By W. S. Middleton, M. D.
O. O. Meyer, M. D.
CANCER SYMPOSIUM
By Joseph F. Smith, M. D.
Leo G. Rigler, M. D.
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TABLE OF CONTENTS PAGE 224

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TABLE OF CONTENTS

ORIGINAL ARTICLES

Page

The Clinical Expressions of Marrow Insufficiency by William S. Middleton, M.D., and Ovid O. Meyer, M.D., Madison ---- 231
End Results in the Surgical Treatment of Cancer by Joseph F. Smith, M.D., Wausau ---- 234
The Roentgen Diagnosis of Small Carcinomata of the Stomach by Leo G. Rigler, M.D., Minneapolis ---- 236
Diagnosis and Treatment of Common Precancerous Lesions of the Skin by H. J. Farrell, M.D., Milwaukee ---- 241
Perforated Ulcer by Joseph Dean, M.D., Madison 251
Mold Allergy; Its Importance in Asthma and Hay Fever by Samuel M. Feinberg, M.D., Chicago ---- 254

EDITORIALS

Prostatectomy or Transurethral Resection ---- 258
The Aid of Modern Weapons ---- 259
Foot Disorders ---- 260

MISCELLANEOUS

Page

President's Page ---- 261
Society Proceedings ---- 262
Woman's Auxiliary ---- 264
News Items and Personals ---- 266
Births, Marriages, Deaths ---- 267
Society Records ---- 267
Medical Economics Page ---- 268
Correspondence ---- 271
Cancer Film Strips, Manuscripts, and Projectors Available from State Society ---- 273
Chiropractors Seek Compensation Act Rights, Basic Science Exemptions and Use of Title "Doctor" ---- 273
Senate Kills, Assembly Advances, Bills for Study of Cost of Medical Care ---- 276
Books Received for Review ---- 286
Book Reviews ---- 288
Exchange Advertisements ---- 287

[Entered as second class matter, June 30th, 1903, at the Post Office at Milwaukee, Wis., under Act of Congress March 3rd, 1879. Transferred to Madison, Aug. 1st, 1929.]
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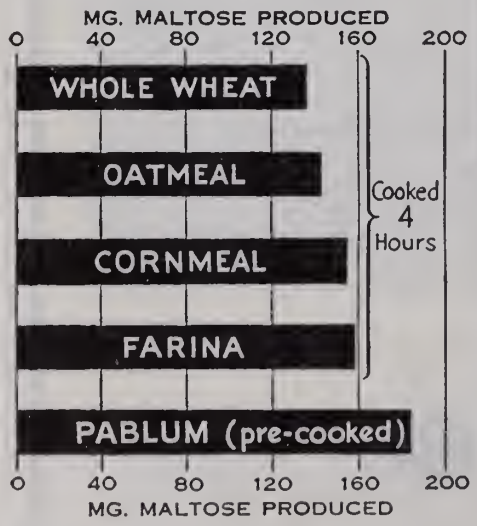
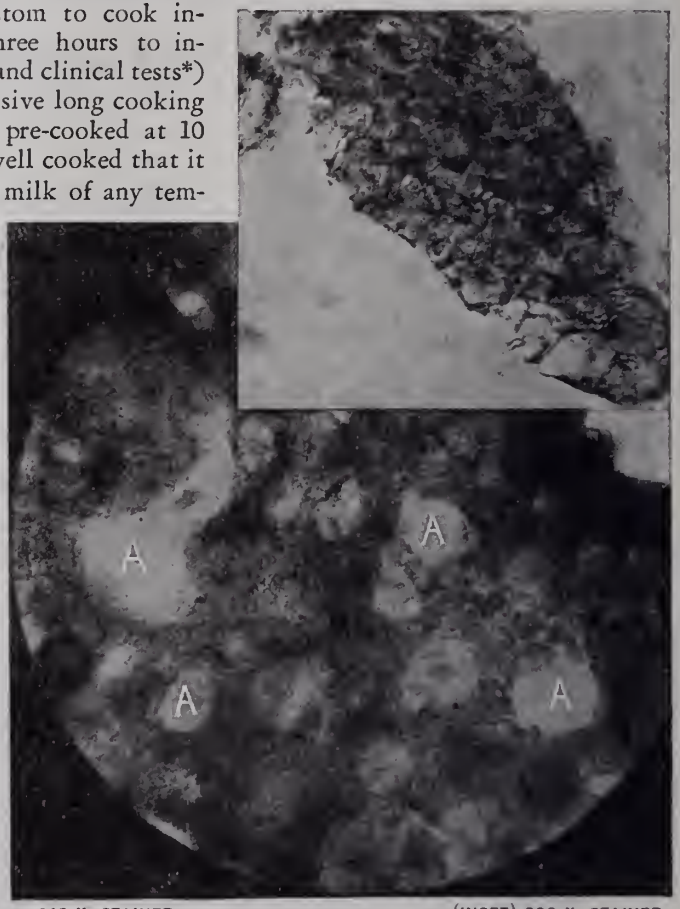


*Chart shows that maltose production is much greater for Pablum prepared with cold water than for other cereals cooked 4 hours. Ross and Burrill (Journal of Pediatrics, May 1934) conclude from this and from the total soluble carbohydrate formed that starch digestion of Pablum is more rapid than that of 6 other cereals.



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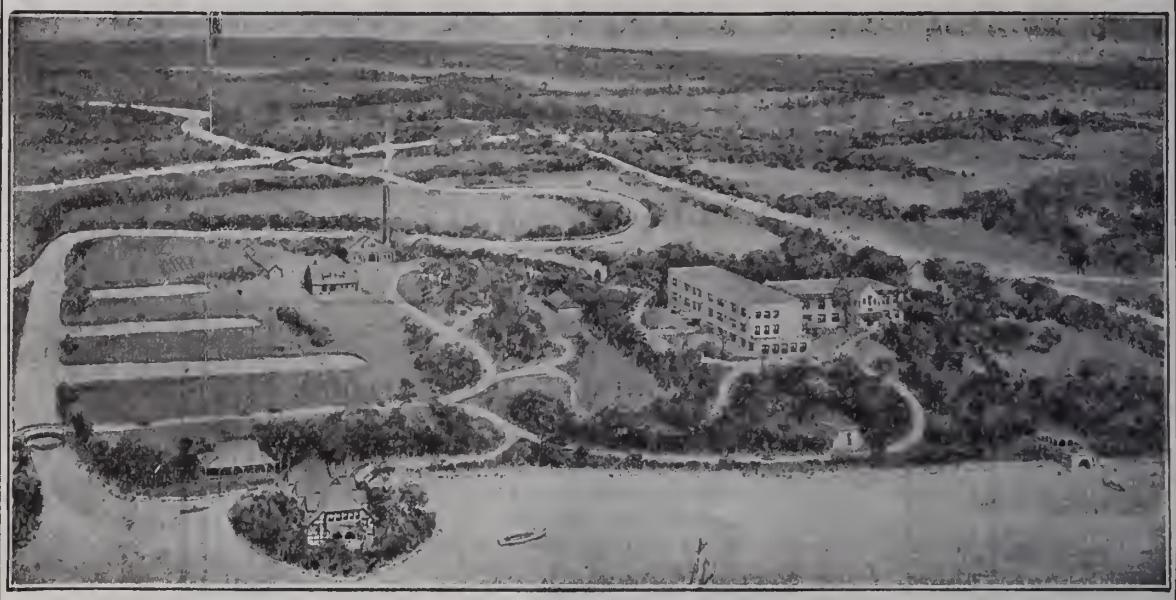

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THE WISCONSIN MEDICAL JOURNAL

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The Clinical Expressions of Marrow Insufficiency*

By WILLIAM S. MIDDLETON, M. D., and OVID O. MEYER, M. D.
Madison

IN FETAL life the liver, spleen and lymph nodes participate with the bone marrow in all phases of hematopoiesis. After birth only the lymph nodes persist in this function and simply for the production of lymphocytes. The liver and spleen have no normal hematopoietic function after birth. A resumption of complete hematopoiesis on the part of these structures occurs only under unusual demand in extrauterine life. Accordingly except for the lymphocytes and probably the monocytes, the adult must depend upon the bone marrow for his normal blood cells.[1]

Interestingly the active bone marrow occupies the entire shafts of the long bones at birth. This functioning structure recedes until at puberty it is restricted to the ends of the long bones, the flat bones and the small spongy bones. This circumstance should emphasize the imperativeness of obtaining sternal and rib marrow for accurate biopsy and necropsy studies in the blood dyscrasias.

Although there is no unanimity as to the development of the several marrow-derived blood cells, in general it may be stated that the polymorphonuclear leucocytes, erythrocytes and thrombocytes are derived from a common root cell, the hemoblast. The specific granular forms of polymorphonuclear cells, neutrophiles, eosinophiles and basophiles, find especial precursors of similarly reacting protoplasm in the myelocytic series. The megakaryocyte of the marrow is the intermediate form in the development of the blood platelet. In all probability the erythrocyte has a forerunner, the megaloblast, in the marrow, although opinion diverges widely on the detail of the size and form of the cell which will eventually undergo evolution into the adult red blood cell.

Growth pressure and amoeboid activity are the two forces operative in the delivery of the blood cells to the circulation. The vascular supply of the marrow lends itself to a ready movement of cells from their centers of formation, in that the arterial capillaries are long with a resultant slow flow and the lining endothelium of the venous sinusoids is very thin. The actively growing marrow is encased in the inelastic bone. Accordingly direction is given to growth pressure and to amoeboid movement. In all probability the latter mechanism is effective in the migration of the polymorphonuclear leucocytes and the platelets from the marrow, while growth pressure alone explains the movement of the erythrocytes into the blood stream.

The stimulus to hematopoiesis is not clearly understood. It is obvious that there may exist a single source or that there may be separate stimuli for the development of the several blood elements. Chemotaxis apparently stimulates leucogenesis and hemorrhage is known to increase the production of platelets. The epochal work of the past decade[2, 3, 4] has added greatly to the knowledge of the formation of the red blood cells; but to date the only known stimulus to the extension of the red marrow required for increased erythropoiesis is decreased oxygen tension.[5]

Depression of hematopoiesis may occur in diseases affecting the bone marrow primarily or secondarily. To this condition Vaquez and Aubertin[6] gave the term "insufficance médullaire". From their description the aplastic anemia of Ehrlich[7] is readily recognized not only in the clinical picture but also in the aplastic marrow. Certain chemical and physical agents as radium, roentgen ray, ben-

* From the Department of Medicine, University of Wisconsin. Presented before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, September 1934.

zol and arsphenamine are the commonest offenders in this direction. Infections may lead to paralysis of the bone marrow and, as a terminal phase, occasionally pernicious anemia may show this picture. The so-called idiopathic aplastic anemia is a fulminant process usually terminating fatally in 8 to 12 weeks. It affects the female of from 15 to 30 years of age by preference. Its blood picture is characterized by the paucity or absence of evidences of regeneration. Signs of hemolysis are singularly lacking. Leucopenia results from depletion of the neutrophiles leading to a relative lymphocytosis. The reduction of the platelets may cause purpura. The progressive decline in all of the marrow-derived blood cells presages the acellular yellow marrow that is usually found at necropsy. Treatment is unavailing.

The interpretation of aplastic anemia as a clinical expression of marrow insufficiency led to a consideration of the possibility of a failure of the independent elements of the bone marrow. In such a development the existence of borderline and overlapping cases was anticipated by reason of the histogenesis of the blood cells. Such occurrences do not detract from the broader application of this principle but serve to emphasize its practicability.

Theoretically, erythropoiesis may fail independent of changes of other elements of the bone marrow. Lescher and Hubble[8] encountered only three cases of pure red cell anemia in an exhaustive search of the literature. A transition to aplastic anemia may be anticipated in most of these patients and this circumstance may account for the infrequence of reported instances.

Depression of thrombocytopoiesis has received much wider attention. Although many causes may operate to reduce or destroy the blood-platelets, attention is directed to idiopathic or essential thrombocytopenia in the present relation. Sixty thousand platelets per cubic millimeter is given as the critical level below which bleeding will occur[9]. The resultant purpura manifests itself by bleeding into the skin and mucous membranes with epistaxis, hemoptysis, hematemesis, melena and hematuria in given cases. Menorrhagia and metrorrhagia may be serious manifestations of this condition in women. Cerebral hemorrhage has been reported. The laboratory findings include reduced platelet count, hypochromic anemia, prolonged bleeding time and normal clotting time with a poorly retracting clot.

After a trial of the simpler measures of hemostasis, transfusions may control the bleeding. A persistence of this result over 5 days may be interpreted as evidence of resumption of the patient's capacity to control bleeding, since the transfused platelets have a life span of only 3 to 5 days[9]. Viosterol, liver, iron, calcium, ultraviolet light and a diet high in vitamins A, B and C may be helpful; but there is no specific. Failing of control by simple measures, splenectomy is frequently extremely beneficial. The results from this operation are not uniform and many successes attend cases in which no gain is seen in the platelet count. Unfortunately it is impossible to predict the outcome from surgery before its actual trial. Roentgen ray therapy to the splenic area and ligation of the splenic artery have not measured up to their early promise.

Leucopoiesis may fail in part or completely. This circumstance for a long time was thought to pertain only to the reaction to infections.[10] More recently it has come to be recognized that a failure of leucopoiesis may anticipate the development of symptoms which have fallen under the clinical heading of agranulocytic angina. Because of the chronologic sequence of events, the term malignant neutropenia would seem more acceptable. Malaise and physical depression precede the frank febrile course. The patient is markedly prostrated. The fever ranges from 101 to 105 degrees F. Necrotic areas appear in the mouth, rectum and vagina. The draining regional lymph nodes alone are enlarged. The hematologic studies are conspicuous. In most instances the neutropenia is the only evidence of a blood dyscrasia. Rarely, and then late in the course of the disease, is there an anemia. The depletion of the neutrophiles is progressive and in the more serious cases may advance to a total absence. With the loss of this natural defense against pathogenic microorganisms, pyogenic processes may gain root in the lungs and the urinary tract. The gravity of the prognosis

is hourly increased in the absence of the neutrophiles. The bone marrow ordinarily shows a failure of the leucogenetic centers, although Krumbhaar and Fitzhugh[11] report instances of apparent failure in the maturation and delivery of the neutrophiles in which the marrow showed definite leucopoiesis.

The prognosis is particularly favorable, if a recognized cause, such as amidopyrine,[12] be removed. Remissions may occur naturally in the course of known toxic as well as idiopathic instances of the disease. Pentnucleotide[13] and adenine sulphate[14] have effected therapeutic remissions in its course. Particular pains should be exercised to control the dosage and the duration of such therapeutic agents in an effort to avoid unfortunate relapses. Transfusions and roentgen ray therapy are not advised.

SUMMARY

In summary, the logic of the histogenic approach to many problems in hematology is urged. It is pointed out that the marrow may fail as a unit and aplastic anemia result. Or any one of its functional components may lag. Red cell anemia is uncommon; but thrombocytopenia and neutropenia are relatively frequent. Although these clinical pictures may blend, a clearer conception of the fundamental process will attend their separate consideration.

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DISCUSSION

Dr. Vincent Koch (Janesville): It gives me great pleasure to speak upon this paper on "Marrow Insufficiency", which Dr. Middleton and Dr. Meyer have prepared in such excellent form. I believe it has been considered from all angles.

Our bone marrow has two distinct functions to perform: to form the constituents of our blood stream, our erythrocytes and lymphocytes; to get these elements actually into the blood stream, hence, marrow insufficiency is responsible for our blood dyscrasias at the present time.

He has spoken so well of the aplastic anemia in its form whereby it may be complete or may have just one of the integral parts of these three factors affected. In the aplastic anemia, we have the condition arising from toxic substances as benzol, arsenic and other factors. Since we have used arsenic in such great amount in the arsphenamine preparations, why have we not seen more of the aplastic anemia forms due to the toxic nature upon the blood stream?

In regard to thrombocytic centers, we come to the leukogenic factor in which the platelets are absolutely reduced, whereby we get our bleeding and hemorrhagic sequelae.

This brings me back to a small patient whom I have had under observation for five years. A child, eight years of age, had terrific nose bleeding, spongy gums, constantly bleeding purpuric spots all the way from a pin point to the size of a silver dollar.

This child was found to have reduced platelets, also a hypochromic anemia and was placed upon liver extract, iron, and high vitamin diet, and con-

trolled to a certain extent until she reached her menstrual cycle.

At the age of thirteen, she began to have terrific menstrual flow. We resorted to blood transfusions and administered liver extract for a time. After ten transfusions, menorrhagia was controlled, but at one of her subsequent cycles she had terrific bleeding and the blood picture became serious. The platelets absolutely disappeared and the anemia progressed until death.

Regarding the neutropenic element of the blood picture, we have the agranulocytosis which Dr. Middleton has mentioned, which was announced by Dr. Schultz in 1922 or 1923 and he thought he had a new disease.

So, where we have a terrific infection superimposed upon a leukopenia and a gradual diminution and loss of neutrophils from the blood picture, it is questionable whether this is toxic in origin, or destroys the blood-forming centers or the infection is so severe it also destroys our leukocytes or agranular elements at the point of infection.

The case I have in mind is a young man thirty-three years of age who antedated his symptoms about five weeks prior to the time he took to bed. He said he felt chilly and had a sore throat; also developed aphonia and dysphagia at times, but still he let things go with the result he developed a severe right tonsil infection. At first it was thought it was a follicular tonsillitis. The membrane spread so rapidly that a possible diagnosis of diphtheria was made.

Culture was taken and before the culture was returned he was given ten thousand units of diphtheria antitoxin. This, in some manner, helped to make the membrane slough, but it was of no avail. A white blood count was taken and we found the white cell count 4,100. His polymorphonuclear elements only gave us nine per cent. We immediately changed our diagnosis to agranulocytic angina.

Dr. Middleton was also called in on this case and recommended the use of the nucleotide serum twice a day, of 20 c. c. each. After each injection, the patient complained of nausea.

We thought we were getting results with this patient in regard to the white count. Our leukocytes rose to 12,000, but unfortunately we found the neutrophils, the eosinophils and basophils had disappeared from the blood picture.

This case went on to leukemia, monocytic but not the aplastic anemia.

I believe further histological studies of hematology are essential to clarify our knowledge of blood dyscrasia.

End Results in the Surgical Treatment of Cancer*

By JOSEPH F. SMITH, M. D.
Wausau

ACCURATE evaluation of the end results in the surgical treatment of cancer is difficult because of the fact that there is a wide variation in the conditions upon which such comparative studies and reports are based. Among the more important conditions which vary widely one may mention the following:

I. Type of case accepted for operation

It must at once be apparent that a study based upon a group of cases in which a large majority of patients applying for treatment are accepted for operation must show a much lower percentage of cures than a study based upon operations performed upon a selected group. The reported end results will also depend largely upon whether all cases *operated* upon are included in the reported final results or whether those cases found at operation to be unfavorable are thrown out in the final study and only those included which at operation were shown to present favorable conditions.

II. Care in preoperative study of cases

Manifestly, in a group of cases not carefully studied for metastases which may be already present or other unfavorable conditions in the patient's general condition, the percentage of reported good results will be lowered in proportion to the carelessness or incompleteness of the patient's preoperative study.

III. The time elapsed from date of operation to date of reported results

It is now generally agreed that the interval between operation and reported results shall be five years instead of three years—the interval formerly accepted. Yet we all have seen cases which have died of recurrence as late as ten or fifteen years after operation

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or even longer. It is apparent that any accepted time interval is merely arbitrary and subject to wide variation in individual cases.

HISTORY OF PATIENT

There are certain conditions present in the patient which may have far-reaching influence in determining the final result, among which one may mention:

1. Duration of the disease

Since cancer begins as a local condition and spreads more or less rapidly to the nearby and distant structures of the patient's body, it follows, other things being equal, that the disease which has existed the longest will have spread farthest and that the patient's chance of cure will be largely determined by the time the disease has existed in his tissues. This fact we all recognize in our campaign for early diagnosis and early operation.

2. Extent of the disease

Cases in which the disease involves wide areas of tissue locally, has already metastasized to distant structures or organs, or patients markedly cachectic or weakened from pain or loss of blood always present a greater operative risk than patients in relatively good condition, and hence the percentage of final cures will depend in a large measure upon the patient's general condition when he comes to operation.

3. Age of patient

For a long time it has been thought that cancer in younger people presented a more serious situation than malignancy in elderly people. Recent reports of series of cases would seem to refute or disprove this belief and the present concept seems to be that cancer may vary widely in its degree of malignancy at any age period and that the disease in younger people is not necessarily more malignant than in persons of more advanced age.

4. Degree of malignancy

The studies of Broders and others have shown that structurally cancerous growths may be divided into three or four fairly definite groups and that these groupings correspond quite closely with the clinical course of the cases.

Thus, in one series of reported cases divided into three groups, there were 100% cures in 8 cases of breast cancer with no axillary involvement, classified in Grade I, 59% cures in 29 cases classified as Grade II and 0% cures in 5 cases classified as Grade III.

In another series with axillary involvement, 100% reported cures in 1 case classified as Grade I, 31% cures in 42 cases classified as Grade II, and 3% cures in 37 cases classified as Grade III are reported. It will thus be seen that the relatively small Grade I group presents a very high percentage of cures, that the large croup classified as Grade III presents an extremely small percentage of cures, and that the middle group classified as Grade II stands midway between the other two groups so far as the chance for permanent cure is concerned.

5. Thoroughness of the operation

In any given case it goes without saying that one factor making for permanent cure must be the extent and degree of thoroughness with which the disease is removed at the time of operation. This presupposes a knowledge of the direction and extent to which metastases are likely to occur and the necessary anatomical knowledge and skill on the part of the operator to follow up and remove all possible tissues involved in the disease.

6. Preoperative and postoperative radiation

The value of preoperative and postoperative radiation or both seems to be still in doubt. Some reported series of cases have shown slightly better results in cases receiving postoperative radiation, some with preoperative radiation, some with both, and in some reports it has not been demonstrated that the groups receiving radiation showed any higher percentage of cures than those not receiving such treatment. In a few groups the reports have even shown worse results in the radiated than in the unradiated cases. Sufficient evidence is perhaps not yet at hand to determine what, if any, additional value radiation with the new, very high voltage machines now being developed, may show. At present it would seem that radiation has a definite value in the treatment of skin cancer and in some cases of cancer of

mucous membranes in which the situation of the disease is such that direct application of the radiation to the diseased tissue can be made. Malignant disease of the lymphoid structures also seems to be favorably influenced in many cases. In the present state of our knowledge and experience, it would seem that the value of radiation is limited to the classes of cases just mentioned.

7. Mutilation of the patient

Up to this time the surgeon's effort has been to secure the largest possible percentage of cures by the widest and most complete removal of the disease. While all this effort makes for permanency of cure, the end result to the patient has not always been satisfactory because of the necessary mutilation and deformity resulting from these extensive procedures. It would seem that in any case requiring procedures which will render the patient abhorrent or unsightly to his friends and associates, such as extensive removal of the face and mouth structures, permanent colostomies, etc., the patient should be allowed to decide between these radical and deforming procedures and other procedures which, while giving a shorter life expectancy, may permit the patient to live out his life in a more normal way than he would be able to do after more radical and mutilating surgery.

The three tables give the end results in 1802 cancer cases treated in the hospitals of Philadelphia in the year 1923 as shown by a follow-up survey in 1930—seven years after operation. Cases which could not be traced or were known to be dead from other causes were deducted, so that the figures present only those known to be living and free from cancer or that had died from cancer recurrence during the seven-year period.

Discussion on page 178.

TABLE I

Degree of Malignancy in Relation to Cures

	Cases	Cures	%
Axilla Not Involved			
Grade I	8	8	100
Grade II	29	17	59
Grade III	5	0	0
Axilla Involved			
Grade I	1	1	100
Grade II	42	13	31
Grade III	37	1	3

N. E. Jour. of Med. 4-19-34.

TABLE II

Group	No. Cases	Living	Dead	% Living
Mouth cancer	243	38	205	15
Uterine cancer	207	15	192	7.2
Breast cancer	245	20	225	8.2

Cases untraced or dead from other causes were deducted. Percentages represent known final results.

TABLE III

Result in 1802 cancer cases treated in the hospitals of Philadelphia in 1923 as shown by survey in 1930.

Group	No. Cases	Living	Dead	% Living
Whole group	1802	191	1611	10.6
Skin cancer	165	55	110	33
Bone cancer	55	10	45	18

The Roentgen Diagnosis of Small Carcinomata of the Stomach*†

By LEO G. RIGLER, M. D.
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IT SEEMS difficult for the physician, who may see relatively few cases of carcinoma of the stomach, to realize that this disease brings about more deaths than any other type of cancer and is one of the most frequent causes of death in individuals past the age of forty-five. It is, in fact, a disease with a low incidence but a distressingly high mortality. Hardly anyone doubts that at present there is only one possible cure for this disease—radical surgery. In spite of the increasing perfection of surgical technique, the results of this treatment, considered on the whole, are most disappointing. One has

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only to read the paper of Maes[1] to understand how gloomy the outlook may be. While some optimism has been expressed in other quarters in recent years[2], it is a fact that the mortality from carcinoma of the stomach, considering all cases, is at least ninety-five per cent.

The reasons for the failure to deal adequately with this disease are numerous and have been repeatedly discussed. There is no doubt that this tumor is most insidious in onset; it may advance to large size without any appreciable symptoms; it may metastasize very early; or it may be so situated that it is inaccessible to surgical procedure. There is also no doubt that the considerable delay in instituting treatment of these cases is due in some measure to the failure of the afflicted individual to consult his physician at the beginning of his symptoms rather than at an advanced stage.

Nevertheless, one of the most important factors in the delay in adequately treating a patient with carcinoma of the stomach is the inability of the average physician to recognize the condition in its early stages. It is obvious that the diagnosis can be readily made when there are symptoms of marked pyloric obstruction, a large palpable mass, a considerable degree of cachexia, and other obvious signs. Usually, however, a correct diagnosis at this time is of little value in saving life. At this stage, surgery is usually impossible or presents an extremely high risk. There is only one sure way of making the diagnosis early—that is by x-ray examination.

The roentgen study of the stomach is, no doubt, the most exacting type of x-ray examination and probably is one of the most difficult procedures in medical diagnosis. In spite of this, in experienced, competent hands, under favorable conditions, it has become an amazingly accurate procedure. Statistical reports from large institutions such as the Mayo Clinic[3], the Massachusetts General Hospital[4] and others indicate that the roentgen diagnosis of carcinoma of the stomach may be made correctly in 95 to 98% of the cases. In our own experience, for example, with a series of eighty proven cases, ninety-five per cent were found to be correctly diagnosed.

The fact that the roentgen examination of the stomach is a very accurate procedure and affords the best possibility for a correct diagnosis of carcinoma of the stomach at an early stage is now generally accepted. There still remains a serious doubt as to how early in the course of the disease the diagnosis can be made. The truth is that the vast majority of cases which present themselves for roentgen examination are far advanced and relatively easy to recognize. Unfortunately, it is chiefly upon these cases that the above mentioned diagnostic accuracy depends. It is rare that the roentgenologist has the opportunity even to test his diagnostic skill upon very small lesions. If that opportunity were afforded him it seems reasonable to suppose that the percentage of error would be greater than five per cent. Nevertheless, an increasing experience indicates that, in some cases at least, a correct roentgen diagnosis may be made even when the lesion is exceedingly small. The following cases are reported in order to demonstrate this possibility.

CASE I

L. F., a female aged forty-four, was admitted to the University Hospital October 29, 1927, complaining of pain in the left upper quadrant of the abdomen, epigastric distress following meals, relieved by vomiting, a twenty-four-pound loss of weight in the past six months, lassitude, nervousness, and irritability.

Her first gastric symptoms were noted three years earlier at which time they suggested those of gall bladder disease. Fourteen months prior to this admission a cholecystectomy was done. The stomach was explored at that time and thought to be normal. There was little relief from the operation. X-ray examination of the stomach five months later was said to be negative.

Physical examination was negative except for the evidences of some loss of weight.

Laboratory findings of note were as follows: hemoglobin 90%; red blood cells 4,800,000; gastric contents, free HCL 8°, total acid 20°.

There were no other significant findings.

Clinical impression: "Probable gastric neurosis."

Roentgen examination of the stomach with the barium meal on Nov. 4, 1927 (Fig. 1) revealed a small area of rigidity on the lesser curvature of the stomach just proximal to the incisura angularis with loss of peristalsis and slight thinning out of the density of the barium at this point.

Fig. 1. Roentgenogram of barium-filled stomach in Case 1. There is an area of rigidity on the lesser curvature which was demonstrated to be constant. In addition there is a slight filling defect (arrow), both of which indicate a small carcinoma.

Roentgen diagnosis: "Very small scirrhous carcinoma of stomach."

At operation by Dr. A. C. Strachauer the lesion was found with great difficulty and on examination suggested a small scar. Nevertheless, because of the x-ray findings, resection of the stomach was done. The postoperative course was uneventful and the patient is alive and well at this time, approximately seven years later.

The gross pathological findings are shown in Fig. 2. The small area of involvement measures about 13 mm. in diameter and is very flat. Even the pathologist was somewhat in doubt as to the nature of the lesion until the microscopic examination which revealed a typical scirrhous carcinoma.

The roentgen examination in this case revealed a change both in the form and physiology of the stomach. This enabled a positive diagnosis of carcinoma to be made, although neither the surgeon nor the pathologist, with the gross specimen in hand, was able to determine the nature of the lesion with certainty. The early diagnosis in this case was entirely due to x-ray examination. It seems reasonable to assume that the seven year survival of this patient is due directly to this procedure.

Fig. 2. Photograph of resected portion of stomach in Case 1. Note the flat smooth area with a small nodule above it (arrows) which represents the scirrhous carcinoma about 1.5 cm. in diameter.

CASE II

A. P., a male aged 63, was admitted to the University hospital out-patient department August 10, 1933, complaining of rather vague epigastric pain and a feeling of heaviness in the stomach region for the past eight months. This was becoming more severe of late and there was distress after food. He had lost ten pounds in the past three weeks.

Other than an attack of lead colic four years before there was nothing significant in the past history.

The physical examination was essentially negative.

The only laboratory finding of note was the absence of free HCL from the gastric contents even after repeated examinations with the use of histamine.

Clinical impression: "Possible carcinoma of the stomach."

Roentgen examination of the stomach with the barium meal was done August 18, 1933 (Fig. 3). This revealed a small area of rigidity on the lesser curvature of the stomach near the pylorus which appeared constant. There was no filling defect but the location of this rigidity, the absence of a crater, and the constancy of the finding on repeated examination served to rule out ulcer or simple spasm. The absence of peristaltic activity in this local area was notable.

Roentgen diagnosis: "Very small scirrhous carcinoma of stomach."

At operation by Dr. Wm. T. Peyton, the stomach, pylorus, and duodenum appeared externally normal. Because of the roentgen findings, the stomach was incised, whereupon a very small, superficial ulcer was found with a slight thickening of the mucosa about it. The evidence of pathological change was so minimal that only an excision of a wide area around the ulcer was made and the stomach closed. The postoperative course was uneventful. Resection of the stomach was recommended but was refused by

Fig. 3. Roentgenogram of barium-filled stomach in Case 2. There is an area of rigidity on the lesser curvature (arrow) near the pylorus. This was constant and indicated the small scirrhous carcinoma.

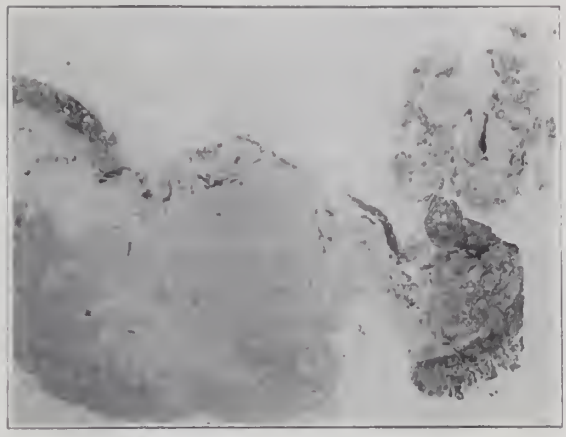

Fig. 4. Microphotograph, low power, of excised mucous membrane of stomach of Case 2. Note the erosion of the mucous membrane and the small adenocarcinoma to the right of it.

the patient who seemed to have been relieved completely of his symptoms when last observed.

The microscopic examination of the excised specimen is shown in low power in Fig. 4. There is an exceedingly small adenocarcinoma surrounding a superficial erosion of the gastric mucosa. The lesion was so small that it could be demonstrated with great difficulty on gross examination.

In this case, the accuracy of the roentgen examination, in view of the microscopic size of the tumor, is even more striking. Part of the change seen in the roentgenogram (Fig. 3) was due, no doubt, to spasm as the tumor does not appear that large. In view of the fact that the stomach was not resected, however, the exact extent of the tumor is not known.

These two cases are the most striking illustrations of a much larger series of a similar nature which have been observed by the author and his associates. They demonstrate clearly that x-ray examination may reveal carcinomata of the stomach of very small size. We have also studied a number of cases which came to roentgen examination within four to six weeks after the very first onset of symptoms. In these cases, the lesions while larger than those described above, were relatively small, yet easily demonstrable by careful x-ray study. It is indeed unfortunate that more patients cannot be examined in this fashion so shortly after the beginning of their illness.

Obviously there is another side to this picture of the success of roentgen examination of the stomach. A certain number of cases of carcinoma are completely overlooked even by the most competent roentgenologists under the most favorable conditions. Fortunately these are most often situated in the cardiac end of the stomach, usually just lateral to or above the esophageal orifice. The surgical approach here is most difficult, if not impossible, so that the failure to diagnose a lesion does no great harm. Occasionally a carcinoma of the posterior wall lower down may present great difficulty. There is one method of reducing the number of these errors which is insufficiently used, —that is, repeated examinations. Cases are frequently seen which, on the first examination, appear to be negative or highly doubtful; on reexamination in a week or two they may become very obvious. Where there is any reasonable clinical suspicion of carcinoma of the stomach a single negative roentgen examination should never be considered final.

A much greater problem than the failure to visualize carcinoma of the stomach is the differential diagnosis of the numerous lesions which are observed. While the scope of this paper does not permit any exhaustive discussion of this problem, a few personal observations may not be amiss. With our increasing search for small cancers the problem of determining definitely whether a lesion observed is benign or malignant becomes much more difficult.

DIFFERENTIAL DIAGNOSIS

Benign tumors of the stomach can usually be distinguished from the malignant variety with certainty. Neverthless, they so frequently become malignant that we believe they represent the progenitors of certain types of carcinoma. In that respect, therefore, the roentgen diagnosis of a benign tumor may be considered, in fact, an early diagnosis of carcinoma. Our experience would indicate that the polypoid tumor of the stomach, even if it is microscopically benign, is likely to recur as a carcinoma.

The most commonly discussed differentiation is that between benign and malignant ulcers. There are numerous direct signs, which have been so repeatedly described that it is unnecessary to detail them here, which help to distinguish the peptic ulcer from the carcinomatous one. In my own experience repeated roentgen examination after two or three weeks of rigid bed rest and a markedly restricted diet has been exceedingly helpful in distinguishing the doubtful cases. In almost all instances the crater of a benign ulcer will diminish markedly in size or almost entirely disappear in this period of time while the converse is usually true in the malignancies. Recently, in a man of 32, a large crater was observed. While under this therapeutic regime he obtained almost complete relief of symptoms, but the size of the crater, as observed roentgenologically, showed no change and the ulcer proved to be carcinomatous. There are, however, exceptions to this rule. In one case the carcinoma grew into the base of the ulcer simulating healing. In another the ulcer niche disappeared completely even while the carcinoma was increasing in size, but these are the rare exceptions. In general, the rule holds and is most helpful in difficult cases.

Perhaps the most difficult differential diagnosis concerns itself with lesions just proximal to or in the pylorus. Ulcers in this region are frequently malignant, but multiple benign ulcers may occur, which, with their attendant scar formation, contraction of the lesser curvature, and spasm, may closely simulate carcinoma. Repeated examination to demonstrate the constancy of the distortion, the absence of a niche although marked deformity or filling defect is observed, complete loss of peristalsis in the area of involvement, infiltration of the greater curvature, and the presence of a palpable mass all tend to support the diagnosis of malignancy. Occasionally hypertrophic pyloric stenosis may be difficult to distinguish from carcinoma. In general, unless they show the characteristic signs described by Kirklin[5], that is, the smooth elongated pyloric canal, the notching on the greater curvature, and the invagination of the base of the duodenal bulb, malignancy should be diagnosed. In these lesions about the pylorus, the demonstration of a relatively intact mucous membrane pattern, is of the first importance in establishing their benign character. By the use of pressure with careful manipulation during roentgenoscopy, the rugae may usually be traced to the pylorus, radiating toward the focus of an inflammatory lesion, but not obliterated as is usually the case in carcinoma.

There are, of course, numerous other problems of differential diagnosis which have not been touched upon, such as the distinction of malignancy from syphilis, foreign bodies, strictures from caustics and other conditions. Suffice it to say that, in spite of the difficulties related above, a careful correlation of the roentgen diagnosis with the clinical and laboratory findings should permit a definite diagnosis in almost every case.

It should be reiterated, finally, that the solution of the problem of carcinoma of the stomach, in so far as it can be achieved with our present knowledge, is largely one of early diagnosis. Upon the shoulders of the general practitioner lies the responsibility of recognizing the seriousness of gastric symptoms in patients of middle age and of urging early and repeated x-ray examinations. Upon his shoulders also rests the responsibility of seeing to it that the roentgen examination be done by one who is most competent in this art—otherwise it may be worse than useless. Upon the shoulders of the roentgenologist rests the responsibility and also the opportunity of making the diagnosis of carcinoma of the stomach early

enough so that surgical treatment may have some opportunity for success.

SUMMARY

Two cases are reported in which very small carcinomata of the stomach were correctly diagnosed by roentgen examination and surgically removed.

The possibilities of early diagnosis of carcinoma of the stomach by x-ray examination and the limitations of the method are discussed.

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Discussion on page 178.

Diagnosis and Treatment of Common Precancerous Lesions of the Skin*

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NO ORGAN of the body offers as great an opportunity to eradicate cancer while still in the incipient stage as does the skin. It is likely that every skin cancer is preceded for some time by a benign lesion, the early recognition and prompt removal of which would prevent the development of skin cancer.

Much progress has been made in educating the general public regarding cancer, and today one seldom sees the extensive ulcerative and fungating types of cancer that were so frequently seen twenty years ago. The average layman now realizes that chronic scaley areas, persistent ulcers, warty growths, etc., present on the skin may be cancerous and seeks early advice. If the physician recognizes these lesions and urges their removal, the percentage of cures can be raised considerably.

It is not within the scope of this paper to enter the controversy regarding the advisability of the use of the term "precancerous". Many investigators believe that the term should not be used—that a lesion is cancerous or it is not. Nevertheless, I believe that the lesions described in this paper if not per se cancerous at the time of examination are very liable to become so if allowed to remain; and that the term precancerous will suggest to the physician that the lesions are at least potentially cancerous, and he will urge their continued observation or removal.

It is the purpose of this paper to discuss the various types of lesions considered precancerous, which are most frequently encountered by the physician in general practice, and to point out the salient features of diagnosis and the most successful methods of treatment.

I. Leucoplakia. The incidence of cancer of the mouth arising from patches of leucoplakia has been estimated to be between 25 and 30%. Bloodgood believes that it is second in importance to poor teeth as the causative agent in buccal carcinoma.

Statistics tend to place the incidence of syphilis between 65 to 80% in cases of leucoplakia. While it is not per se a syphilitic process, syphilis combined with chronic irritation is the usual cause of leucoplakia. The Wassermann reaction is not constantly positive in cases of syphilitic leucoplakia and the syphilic nature of the process is not always easy to prove, although it may be strongly suspected, especially when associated with a superficial glossitis. Syphilitic leucoplakia is most frequently located on the lips and at the commissures. When located in other areas of the buccal cavity, it is usually secondary to irritation.

Diagnosis. Leucoplakia manifests itself as a whitish thickening of the epithelium of the mucous membrane. The surface is usually glistening and opalescent, and often re-

* Presented before 93rd Anniversary meeting, State Medical Society of Wisconsin, Green Bay, September, 1934.

ticulated. It may occur in various sized patches and plaques. The lips, gums, cheeks, and tongue are most commonly affected. It occurs most frequently in males over the age of 40. At times it may be confused with lichen planus and thrush, but the clinical picture is usually very definite.

Treatment. All sources of irritation should be removed. The use of tobacco in any form is contraindicated. Hot and spicy foods should be eliminated. Decayed teeth and teeth with rough surfaces should be removed.

When patches of leucoplakia show signs of inflammation such as fissuring or increase in size, they should be removed. This is best done by means of electrodesiccation. If the patches are too extensive, radium may be used. When extensive involvement of the lip is present, shaving of the vermilion surface offers a prompt and effective method of removal.

If syphilis is present it should be treated, although antiluetic treatment has no direct effect upon leucoplakia.

II. Arsenical Keratosis. Arsenic has long been recognized as the etiologic agent in the production of arsenical keratoses. Recent reports also point out the relationship between various types of superficial epitheliomata and the ingestion of arsenic. The presence of arsenic in these lesions can be demonstrated by microchemical analysis.

The lesions are due to the long continued action of the drug upon the epithelium and may not be manifest clinically for a decade or more after the use of the drug has been stopped. Arsenic in the form of Fowler's solution given as a general tonic or in the treatment of various cutaneous disorders seems to have been the most common offender, although the increased use of arsenic in the industries and as insecticides, poisons, etc., may also be a factor in the production of these lesions.

Arsenical keratoses occur most commonly on the palms and soles as discrete warty lesions, usually located about the sweat follicles. They are usually symmetrical and surmounted by small black shiny pegs of keratin which, when picked out, leave pits. Arsenic is present in the keratoses, being distributed between the cells of the horny layer.

These lesions may remain inactive for a number of years, but because of the trauma to which the palms and soles are constantly subjected, they frequently become fissured, eroded, or ulcerated, these changes being indicative of early malignant degeneration. When malignancy does occur, it is usually of the squamous cell type with early metastases.

Treatment. Arsenic should be prescribed with great caution in the treatment of chronic recurring dermatoses such as psoriasis, dermatitis herpetiformes, and the various types of eczemas.

The lesions should be destroyed by electrodesiccation, or removed surgically at the first signs of fissuring, erosion, or ulceration.

Senile Keratoses. These lesions occur in individuals usually past 60 years of age, being located principally on the temples, other parts of the face, and backs of the hands. They are most commonly seen in persons who have been exposed to the elements. The lesions are flat or slightly elevated, varying in size from that of a pea to that of a dime, usually multiple and yellowish brown to grayish black in color. Their surface is covered with dry, firmly adherent scales or crusts. On palpation they are embedded, sharply marginated, firm and rough. On removal of the horny covering with a curet, one sees numerous small conical projections on the under surface which fit into dilated follicular orifices. The exposed surface is moist, red, and superficial. Ulceration may occasionally be present.

Seborrheic Keratoses. These lesions occur especially on the chest, interscapular region, about the waist line, and on the face. They seldom occur on the backs of the hands. The lesions are usually multiple. They are sharply circumscribed, rounded or oval, flat elevations, varying in size from that of a pea to that of a quarter. They are covered with greasy friable scales, and are gray, yellow, brown, or black. The whole lesion is freely movable over the underlying skin. On removal of the lesion with a curet, one finds a small wart-like projection in the center of the underlying skin. The lesions are found most often in association with a greasy, seborrheic skin. They are most frequently seen in persons past 40 years of age.

The histopathological picture of both lesions is distinctive.

These two conditions should be separated because they vary in importance as regards their relationship to malignancy.

About 5% of senile keratoses undergo malignant changes of the prickle cell type, whereas seborrheic keratoses only occasionally become malignant, and if they do, it is of the basal cell type.

At the onset of malignancy the lesions become inflammatory and later ulcerative or verrucous.

Treatment. Because of the difference in prognosis of these two types of lesions, treatment of the senile keratosis should be more vigorous and radical than in the case of the seborrheic keratosis. Small lesions are best removed by the use of electrodesiccation while the more extensive lesions may be treated by intensive doses of x-rays or radium.

CHRONIC ULCERS

1. Syphilis. It is rare for a syphilitic ulceration of the skin to undergo malignant degeneration. Ulcers of this nature that do not heal under antiluetic treatment should arouse suspicion of carcinoma, and a biopsy should be performed to rule out this condition.

Cancer is associated with tertiary syphilis of the buccal cavity, however, in 30 to 60% of the cases. The malignant degeneration does not necessarily wait until the involution of the syphilid and the formation of a scar, but may begin while the syphilid is still active. For that reason, it is highly important to inspect ulcerative syphilids of the mucous membrane for the rolled pearly indurated border which suggests early epithelioma and to make microscopic examinations from suspected lesions especially if there is not immediate response to antisyphilitic treatment. The metastasis of malignant lesions on the mucous membrane is very rapid and delay is dangerous. The coexistence of a positive Wassermann reaction on the blood and a lesion on the mucous membrane does not prove the lesion to be a syphilid. Because of their location which often interferes with mastication and deglutition, late syphilids of the mucous membrane may be associated with emaciation and cachexia to such an extent as to be suspicious of malignancy.

Treatment. If there is not immediate response to antiluetic treatment, a biopsy should be taken. If carcinoma is present, immediate treatment for this condition should be instituted, combined with vigorous antisyphilitic treatment. The antisyphilitic treatment should be continued for some time to prevent recurrence of mucous membrane lesions.

2. Tuberculosis. Lupus vulgaris is the most common type of cutaneous tuberculosis to be associated with cancer. Cancer of the prickle cell type occurs in 1 to 4% of the cases and the great majority of these following the prolonged use of therapeutic agents such as x-rays and radium.

Treatment. Small lesions of lupus vulgaris may be excised or destroyed with cautery. In the more extensive types successful results may be obtained by the use of general hygienic measures combined with a salt-free diet. X-rays and radium should be used with considerable caution.

Varicose Ulcers. These ulcers are very common, but they seldom undergo malignant degeneration. There are only about 60 cases of carcinoma arising from varicose ulcers reported in the literature. When malignancy does occur, it is usually first evident at the border of the ulcer, and is characterized by the typical clinical picture of carcinoma—namely the indurated, rolled pearly border. In cases of doubt, a biopsy should be performed.

Treatment. The treatment of varicose ulcers is well known and needs no repetition.

V. Occupational Precancerous Lesions. These conditions occasionally occur amongst workers who are constantly in contact with tar and oils. It is most frequent amongst tar distillers, gas works stokers, creosote workers, benzine distillers, coal tar workers, pitch handlers, lamp black workers, and aniline dye workers.

Keratoses frequently follow prolonged exposure to these substances and occasionally undergo malignant degeneration. The kera-

toses are most frequently found on exposed areas such as the hands, forearms, and face.

Treatment. When the keratoses show increase in growth or become fissured, they should be removed by means of electrodesiccation or surgical excision.

Radiodermatitis. This condition may be produced either by one massive dose or by the cumulative effect of repeated small doses of roentgen rays or radium. The sequelae usually appear in the following order: erythema, pigmentation, telangiectasia, ulceration, keratoses and cancer, which usually develops in the ulcer or at the base of the keratoses.

X-ray and radium reactions may be divided into two types,—acute and chronic. The acute type is subdivided into first, second, and third degrees.

First Degree. This consists of a simple cutaneous erythema accompanied usually by burning and itching, which appears usually from 5 to 7 days after exposure. As the erythema fades an area of pigmentation remains, which may be present for several weeks. In hairy areas epilation may occur.

Second Degree. This consists usually of hyperemia, edema, vesiculation, erosion, or superficial ulceration. The color usually becomes scarlet. In 10 days or 2 weeks the epidermis is exfoliated, resulting in an eroded surface. Second degree reactions will heal spontaneously in from 9 weeks to 3 months depending upon the intensity of injury and the extent of surface involved. Permanent alopecia results.

Third Degree. There is no sharp line of demarcation between reactions of second and third degrees. However, if ulceration and necrosis involve the cutis the reaction is one of the third degree. The resulting ulcer is destructive. The margins are abrupt and the floor deep-seated containing usually a thick, horny, yellowish-colored adherent exudate and an absence of granulations, or, if present, they are very unhealthy. The ulcers may remain indolent for several months and even years. Occasionally they may heal spontaneously. The resulting scar may be normal or keloidal. Pain is always present.

Chronic Radiodermatitis. This is usually characterized by telangiectasia, atrophy, scarring, pigmentation, alopecia, and keratoses. The skin is dry, and leather-like and when the injury is adjacent to tendons as on the dorsum of the hands, considerable deformity may result.

Cancer, practically always of the metastatic squamous cell type, develops secondary to keratoses or ulcerations.

The usual type of keratoses is a slight elevation consisting of a thickened but firmly adherent horny layer. They vary in size from a pin head to that of a dime.

1. Prophylactic Treatment. Care in the estimation of dosage and administration of treatment should prevent serious forms of radiodermatitis. Failure to watch exposure time and repetition of treatment without observing proper intervals is responsible for most cases of radiodermatitis.

Of the cutaneous affections that are amenable to irradiation, the majority can be cured or improved by a quantity of radiation that will have no injurious effect on the skin. In such conditions as epithelioma it is justifiable to produce a severe reaction when necessary. Prolonged treatment should be avoided. Careful shielding of areas of the skin not being irradiated is essential. Irritating and stimulating chemicals applied to the skin before or after x-ray treatment will greatly enhance the effect and should not be used.

No known method will prevent a reaction after an erythema exposure has been given. In the acute stages applications of soothing lotions are helpful in alleviating subjective symptoms.

The treatment of chronic radiodermatitis is essentially surgical. If the ulcer is small, it may be excised and the resulting wound allowed to heal by first intention. When location and extent of the burn make complete excision impossible, it should be removed as thoroughly as possible, and skin grafting performed. In order to prevent malignant degeneration of keratoses, it is advisable to destroy these areas as soon as possible after their appearance. This is best done by means of electrodesiccation.

Recently work has been done in Germany with the use of irradiated vaseline in the treatment of chronic radiodermatitis. Vaseline is exposed to radium emanations and the alpha rays absorbed. The irradiated vase-

line is then applied to the area of radiodermatitis and allowed to remain for 12 hours. It is then removed and plain boric acid ointment applied and the above treatment resumed one week later. Germans report excellent results by this method claiming early relief from pain, healing of ulcers, disappearance of keratoses and telangiectasia. I have used this in one case. There was definite relief from pain and partial healing of the ulcer. However, the cost was so high that it was necessary to discontinue it.

Moles. Considerable controversy has always existed regarding the treatment of moles. Many observers, notably Bloodgood and Kean, believe that all moles and nevi about the body should be removed, while others believe that only certain types of moles are dangerous and advocate their removal. They refer principally to the type of mole that is liable to become a malignant melanoma.

It is quite generally believed that all melanomas arise from pre-existing nevi. This has probably been exaggerated. There was a history of origin of melanomas from moles in only 50% of the cases reported by Broders and MacCarty and in 36% of the cases reported by Horwitz. In a series of 265 cases of melanomas analyzed and reported by me, I was able to obtain a history of pre-existing moles in only 60% of the cases.

However, the incidence of development of melanomas from pre-existing nevi is sufficiently high to warrant removal of nevi, especially in areas subjected to irritation.

Clinically, nevi are classified as hard and soft. Hard nevi are acanthotic, and keratotic non-nevus cell tumors, pigmented or non-pigmented, and papillomatous. They may be pedunculated or have a broad base. They are of a hard consistency and seldom contain hair.

Clinically, the soft nevus may or may not be pigmented. They are soft in consistency, often pedunculated and contain hair. They are most commonly located on the back, face and in the axillae and groin.

When these types of nevi become malignant it is usually of the prickle cell type.

The most dangerous type of mole is the blue, blue black, or slate colored nodule varying in size from .5 centimeters to several centimeters. The lesion may have a rounded or flat surface and may be raised or on a level with the surface of the skin. It is firm and bleeds easily. The color does not disappear on diascopic pressure. Occasionally one is able to see very fine radiating projections extending into the adjacent normal skin. This is usually a sign of early growth and may shortly be followed by numerous pigmented satellite lesions indicating local dissemination of the tumor. Later the tumor may become ulcerative and fungoid in nature and at this stage is usually accompanied by multiple metastatic cutanoeus nodules. Malignant melanomas most frequently arise from this type of mole, although any kind of mole may undergo melanotic degeneration.

Treatment. All moles located in areas that are subjected to constant irritation should be removed. In the hard unpigmented or soft type of nevus this may be done by simple surgical excision or by electrodesiccation. In the type described as dangerous the mole should be removed radically. This is best done by means of the cautery excision, and should include about 4 cm. of normal skin on all sides of the lesion and the incision should be deep enough to include the subcutaneous tissue. If examination of the tissue shows melanotic degeneration, excision should be followed immediately by several intensive doses of x-ray or radium to the excised area and to the adjacent lymph glands.

A guarded prognosis should always be given. Recurrences take place locally in about 30% of the cases, and the mortality rate is 57% with an average span of life of about 5 years.

Paget's Disease of the Nipple. This is a specific and rare form of epithelial disease which is essentially carcinomatous, and usually involves the nipple or areola of both the male and female. It is characterized by an early eczematoid stage, crusted or keratotic circumscribed pruritic patch which over a period of time becomes infiltrated and ulcerated. The ulcerated zone is mottled with whitish epidermic patches and is more sharply circumscribed than eczema. The lesion is usually always unilateral, and occurs most frequently in individuals past 40. In

advanced stages there is frequently retraction of the nipple and one frequently finds single or multiple nodules throughout the breast tissue.

The histological picture is quite definite, being characterized principally by the presence of the so-called Paget cells. These cells are larger than the neighboring prickle cells. They have clear protoplasm and an enormous vacuolated nucleus. Prickles are absent.

Considerable controversy exists regarding the origin of this condition. Some investigators believe that it is a form of intra-epidermal carcinoma, the consensus of opinion, however, favors the theory of origin from the lactiferous ducts, and that the epidermal changes are secondary to true breast cancer. In every case reported in the literature in which the entire breast was removed and examined histologically carcinoma was found to be present in the ducts.

Treatment. Eczematoid and eroded conditions of the nipple that do not respond to the usual therapeutic measures should be looked upon with suspicion, and a microscopic examination of the tissue made to rule out a possible Paget's disease. If this condition is present a total mastectomy should be performed. Simple excision of the nipple and areola is not sufficient.

CONCLUSIONS

If the above described conditions are recognized while still in their incipient stage and necessary treatment instituted, the incidence of cancer of the skin can be greatly reduced.

CANCER CLINIC

Dr. Ellis Fischel (St. Louis, Mo.): These papers are very pertinent and very interesting to me. Dr. Farrell discussed the subject matter in his paper from a dermatological viewpoint.

It is always very interesting to me to get the viewpoint of the dermatologist on lesions which are, one might say, anybody's game. Cancer to me is a surgical disease. That does not mean the surgeon should treat all cancers, but from its very nature it properly belongs to the realm of surgery.

That does not mean it should always be treated by surgery, and by surgery, of course, we mean the use of the scalpel and cautery of the high frequency current or coagulating current.

Recently I have been trying to make surgeons realize that radium should be used by surgeons as an instrument of destruction as much as by the radiologist. Certainly any surgeon who is going to treat cancer must become adept in the various uses of radium.

This is a little bit off the subject, but I shall try to give you my viewpoint to show you why, when dermatologists discuss lesions which are pre-cancerous or cancer, their viewpoint is necessarily a little bit different from the surgeon's viewpoint.

This is nothing new to me because Barnard Free Skin and Cancer Hospital has a very strong, active dermatological department and you can realize there has been discussion among the staff members as to the proper division of certain cases. It has worked out to a satisfactory understanding in the hospital, but I find in private practice the dermatologist accepts cases which in a free clinic are unquestionably referred to the surgical service.

This is not any cause for hard feeling. It is a cause for a little deep meditation on the part of the surgeon in regard to the results of treatment given by the dermatologist.

Dr. Farrell gave you, quite correctly, I think, a perfectly accepted mode of handling leukoplakia. I think that the best thing we can do in leukoplakia is to keep close track of the patients, but to leave the lesion alone, if possible, because any treatment other than absolute destruction, if you are going to try to eliminate the leukoplakia, will have to be an irritant. If we are going to treat it, I feel it should be treated as a cancer and totally destroyed.

The time of treatment, in my opinion, is when it is thick, when you can feel it with your finger, not look at it but feel it with your finger. When you have a palpable leukoplakia, it is becoming cancer, if not already cancer.

I should like to mention here, in passing, that radium, in my hands and observation, is not the best method to treat leukoplakia. I advise actual destruction with the cautery or high frequency current, excision or coagulation, or best of all, in the limited areas, its removal with the scalpel and immediate suture. Occasional cases are met where we have to destroy a large part of the buccal mucous membrane. After excision, the defect is filled with a free graft.

I simply want to mention the question of leukoplakia, because I think it is one that puzzles the general practitioner and specialist as much as any other condition in the mouth.

There is one other thing which I should like to mention in connection with Dr. Farrell's paper, because I think it is important. I have seen so many tragic mistakes made in the belief that a tumor of the tongue is gumma when it really is cancer.

Gumma and cancer exist together in the tongue and Dr. Farrell mentioned the fact that unless there is rapid improvement in the growth of the tongue, be suspicious of it even if you have a positive Wassermann. I say be suspicious of it even if you have a positive Wassermann and even if you have rapid

improvement, under antisyphilitic treatment. Do not think that it is syphilis only, but be suspicious of cancer all the time.

Biopsies of tongue lesions that look at all like cancer are absolutely essential no matter whether you have a four plus Wassermann or the patient has improved under antisyphilitic treatment or not not.

At Barnard Hospital, we studied the incidence of syphilis in leukoplakia and in cancer of the tongue. The incidence of syphilis in cancer was exactly the same as the incidence of syphilis in all cases which came to the clinic for any reason.

Dr. Bloodgood makes the statement that he did not see leukoplakia in a patient who did not use tobacco in some form or other. I have heard him say when he found it in nuns he found they took snuff.

I am sure leukoplakia can occur in a non-tobacco user, but I would rather hear from the rest of you. There are so many points in both of these papers that are worthy of discussion that I should like to make it a round table discussion rather than a one-man talk.

Dr. W. D. Stovall (Madison): There are a number of things mentioned by Dr. Fischel which we would like to discuss. It will be important to bring out matters in which we are all interested.

First of all, I would like to have somebody talk on the limitation of biopsies, if they have limitations; to have somebody talk on the limitations of the use of radium and x-ray and of the inadequacy of trained people to use those methods. There are many factors which we should have fixed in our minds because they are the things bothering us here in Wisconsin in promoting a campaign for the control of cancer.

The papers are open for discussion and I would like to have you discuss them in an informal way.

Dr. F. L. Rector (Evanston, Ill.): I cannot contribute anything, as you know, in a clinical discussion. My chief interest lies in the educational field of cancer, the organization of existing facilities and improvement of facilities wherever necessary to do this work.

I am conclusively and increasingly impressed with the desirability of discussion such as we have heard this morning; both of these papers, I think, were extremely important.

Dr. Farrell told us about the pre-cancerous lesions. Those are the things which need to be stressed increasingly before the profession and the laity alike so they will get some idea of what these things are likely to lead to.

We all know there is practically no pain in the beginning with any type of cancer except certain types of bone lesions and because of that the patient is lulled into a sense of false security. By the time they wake with discomfort and pain and go to their doctor, it is too late. So I think we cannot emphasize too much the type of discussion we have had here this morning on pre-cancerous lesions, the simple type of common lesion which Dr. Fischel illustrated so nicely in his talk yesterday afternoon.

I get little out of a paper sometimes presented by some man who digs up some unusual thing and is quite proud of the fact he found only two or three cases of that kind in the literature and discourses a great deal on that particular thing which probably would not be seen by anybody in the audience for twenty-five years or never.

So let us keep our minds, for the present at least, on the common conditions of cancer.

I was interested in Dr. Smith's paper on end results of cancer. Last night, across the banquet table at the hotel, I had discussion with a well known surgeon who lives just out of Wisconsin, in which he voiced rather a pessimistic note about our end results.

It is true that we are not curing one hundred per cent of the cancer cases that come to us, but I said to him, "Let us forget as far as we can these pessimistic results and let us think back and consider and emphasis the optimistic part of this program."

You know as well as I do that great strides have been made in the last twenty-five years in the control of cancer and in the cure of cancer. Twenty-five or thirty years ago a cured case of cancer, and a three-year cure was almost a medical and surgical curiosity.

Dr. Fischel said yesterday in his experience and those of his colleagues in St. Louis an increasing number of mistakes are now being made in the diagnosis of these cases when they first come in. That is a very fortunate situation because, as he emphasized, they are seeing these cases earlier and are therefore unable to have an open and shut diagnosis before them when the patient presents himself.

So we are getting back more to fundamentals and I hope as the work progresses in Wisconsin it will be possible to have more discussions of this type.

In the address of your President night before last, he emphasized the work of the cancer committee. About the only reference he made to the scientific work of the Society, as I remember, was in connection with the work of the Cancer Committee, of which Dr. Stovall is such an active member, and I believe chairman at this time.

Dr. O'Leary called upon the Woman's Auxiliary, for instance, to take an active part in this. It was my privilege yesterday morning to talk to the Woman's Auxiliary on cancer and what the women can do about this problem. I put the proposition squarely up to these women that they had a direct responsibility to see that this cancer work was actively brought to the attention of the general public.

I was quite gratified, at the end of my talk, to have a woman from one of the smaller cities of Wisconsin come to me and say, "Doctor, I never realized before we had any responsibility in this cancer work. I am a trained nurse as well as a physician's wife, and I am going home and do something about this problem."

So I think while you have this interest that has been so widely stimulated by the meeting here this week it is a psychological moment to strike with all of your organizations, your State Medical Cancer Committee, and the Woman's Auxiliary. The National Federation of Women's Clubs has made cancer its first point of attack in this public health program for the next three years so I think if you have an opportunity here in Wisconsin and elsewhere to crystallize the thought and the increasing interest in this problem into a very constructive campaign you should do so. In that work, I want to offer you every help that the American Society for the Control of Cancer has to offer. I happen to be field representative in this district.

We are intensely interested in helping you do your job in the best possible way.

Dr. L. M. Wieder (Milwaukee): Being interested in pathology, I know that Dr. Stovall is also interested in the technique of biopsy.

The dermatologist probably takes as large a percentage of biopsies as any individual group in medicine, and I think he recognizes the fact that they must be properly taken to enable the pathologist to be of real value.

I think it is important, when the surgeon or clinician takes a biopsy, to take it with the point in view that it must represent a true cross-section of all the areas that may be of diagnostic interest. In other words, where an ulcer is to be biopsied, I think it is important to take not only the pathologic portion but also that portion extending into the surrounding normal tissue in order to show transitional stages in tissue change.

The biopsy of skin lesions should always extend deeply down into the dermis through the basal layer. On this point, I think Dr. Stovall will readily bear me out.

From the standpoint of limitations of the biopsy we also have to remember the pathologist is at a disadvantage to some extent because he usually has not seen the gross lesion, which often is a very important point in arriving at proper interpretation. For that reason, I think it is imperative that the surgeon or dermatologist should familiarize himself with histo-pathology and see the sections of each case in which he takes a biopsy.

Every once in a while, we see a patient who has an acanthomatous lesion which might be an epithelioma, in whom a biopsy is taken. Very often when the section is sent in with the provisional diagnosis of epithelioma, the pathologist may see a large amount of acanthomatous tissue highly suggestive of epithelioma. It must be borne in mind a great many conditions produce acanthotic changes. That is true of conditions like blastomycosis and some of the verrucous conditions, which may sometimes so closely resemble epithelioma as to warrant a biopsy being taken.

In those cases, the pathologist is definitely at a disadvantage in making his interpretation unless the specimen has been taken through all the layers, including some of the surrounding normal tissues where the epidermis is showing its transitional stages.

There is another thing that might be mentioned in regard to the psychology of biopsy. In the past, there has been great hesitation in taking biopsies of lesions that have been considered malignant or potentially malignant. Such hesitation often delays accurate diagnosis and early and adequate treatment. If a biopsy is taken properly, especially by a method which seals the lymphatics and is followed by irradiation, there is rarely danger in taking biopsies, unless it is a melanotic type of lesion. There excision should be done very widely and biopsy done after the lesion is totally removed.

In fact, at present the tendency is to perform biopsies as a routine on questionable lesions rather than otherwise.

I think Dr. Farrell's paper is very inclusive in regard to the pre-cancerous lesions. I would like to add one that is not common but to be kept in mind as to the economic aspect in regard to liability. I refer to mild industrial trauma especially about the face.

In the past two or three years, we have seen in the office several cases of frank epithelioma which had begun at the site of occupational injury caused by bits of hot metal striking the face and producing superficial laceration. These cases were all reported to the first aid men or nurses as the trauma occurred. Healing had not taken place and at the time we saw the cases frank epithelioma had developed. Therefore, I would include trauma as a potentially pre-cancerous lesion.

Another point which I think might be borne in mind is that of the entire group of squamous epitheliomas of the upper half of the face that are seen, probably the majority are preceded by senile keratosis.

Very often one sees people, especially blonde or titian-skinned old individuals, who come in presenting very numerous keratoses, but in which no actual epithelioma has developed. This can undoubtedly be forestalled for a long time by proper use of a keratolytic ointment. We often see lesions which may be questionable as to the possibility of early epithelioma and which under mild keratolytic ointment for a period come back with the lesion apparently cured. Lesions which are resistant should be adequately destroyed.

There is one point which I desire to emphasize with regard to the statistics shown on cancer by Dr. Smith, in connection with the listing of the percentage of cures of skin cancer in the report from the Philadelphia group.

I think the figures are somewhat misleading as to the curability of skin cancer as far as the total group of cancer is concerned. In the first place, these cases are listed from hospitals. I believe it is the experience of dermatologists in general, especially

those with proper facilities for radium, x-ray and electro-cautery, that a high percentage of cutaneous epithelioma is cured.

The case that gets to the hospital is often one with metastasis, or with extensive ulceration and therefore has a poor prognosis.

I think it is erroneous to assume that these figures show the actual percentage of skin cancer cured. I think a much higher percentage is cured in the private practice of the average dermatologist who uses the methods I mentioned, and that the percentage of cures would reach seventy-five or eighty in a great many practices. So the situation may be somewhat more encouraging than in the table Dr. Smith has shown.

Dr. R. L. McIntosh (Madison): I have nothing to add except in connection with what Dr. Wieder said about the percentage of cures.

I would also like to mention the fact that I think the dermatologist should see these skin lesions, and I deplore the surgeon's attitude that the dermatologist is not qualified to do this. At the same time, I feel the surgeon meddling with skin lesions sometimes does them harm.

I would like to advocate the primary treatment of skin lesions by a dermatologist rather than by a surgeon.

Dr. W. E. Bannen (La Crosse): I am interested in the subject of biopsy. In doing surgical pathology at Johns Hopkins, it was my good fortune to make a survey of breast tumors under that splendid service of Dr. Bloodgood, and the work that has been done under Halsted, making Hopkins rather a center for breast tumors.

The survey of the biopsies taken and the end results showed that in cases where a section was removed, malignancy found and the patient brought back for a complete amputation, and no one doubts the thoroughness with which those were done under Halsted, perhaps we must take into consideration the mortality that accompanies breast tumors, but the time element from one week up to several months afterward in which the patient was brought in for complete surgery showed that not one case that had a biopsy, a week to several months and subsequent operation, had survived.

From that, I have been very insistent, when a biopsy is done, the surgeon be prepared to have an immediate report and continue his complete operation at once, not allow an interval to elapse.

Dr. Stovall: Dr. Bannen brought up an interesting question on which there is much debate. One other thing might go along with that, which I shall ask Dr. Fischel to comment upon, the relation to biopsy and also the relation of importance of grading malignancies from the viewpoint of the experience of the nation.

Dr. Fischel: In the first place, I think, what has been said of biopsies of ulcers is perfectly true. One point about the biopsy of ulcer is that it is sometimes mechanically difficult to reach it with any kind of instrument that can take a specimen. I am thinking now of the larynx or pharynx or rectum.

Often it is very difficult to get what you want from the margin of a lesion, and if you are fairly reasonably convinced on your clinical experience and your clinical examination that the lesion is cancer, do not be content with one single negative biopsy.

The greatest tragedies I have seen, in my practice, have been from the service of the otolaryngologist, until in St. Louis he finally learned that a negative biopsy from a lesion of the larynx or pharynx which is suspicious of cancer does not mean anything. A negative biopsy does not mean that patient has not cancer.

The same thing applies to the rectum. I have sometimes taken biopsies three times from a rectal growth which was possibly cancer on clinical evidence, and not wishing to subject the patient to artificial anus, have refused to do operation until we had a positive biopsy. As I say, we had to go three times before getting one that showed definitely carcinoma.

In regard to the breast, certainly the ideal arrangement is to have a competent pathologist present at the time the patient is prepared for operation.

Have the patient prepared for radical examination. Cut directly into the tumor so you are certain you are getting the right kind of tissue. Submit the frozen section to the pathologist and proceed accordingly.

Those doing a great deal of cancer work are training the pathologists with themselves as they work, because the pathologist has to be trained in most instances as well as the surgeon.

Occasionally the general pathologist is quite expert, but the general pathologist is not ordinarily an expert tumor pathologist any more than the man doing general surgery and not seeing any more cancer than the average physician, (which, as you know, in the United States, is about one and one-half cases of cancer a year) will be no more competent to pass on an intricate specimen of breast tumor, whether it is cancer or not, than the surgeon.

The other side of the case holds true. The man seeing a lot of cancer has very little need for frozen section work, and yet, in my experience, he is the man who always insists on the pathologist being present and getting that frozen section simply because he wants all the help he can get. That arises from the number of mistakes we make, even with the most careful guarding of the patient with tumors of the breast.

The doctor who mentioned his x-ray experience ought to go downstairs and take one of the reprints by Taylor on the end results in cancer of the breast and read carefully to see the position today of radiology in cancer of the breast.

But the biopsy on cancer of the breast is one of the most difficult things we have to do today. I

do not think one can formulate any rules. We know what the ideal is. Unfortunately we cannot have that ideal all over the country. It is financially impossible, and impossible as regards man power, because there are not enough well trained pathologists in the country to have good reliable frozen section work in every general hospital. We ought to have it but we cannot. We may have it ten or fifteen years from now. There is no one good enough to make a correct clinical diagnosis on every tumor of the breast in ninety per cent of cases.

As a working formula, I advise removal of segment of the breast which contains the tumor. If you have good frozen section available, cut directly into the tumor, take your biopsy and be guided by the pathologist's report.

Usually the surgeon has a pretty fair idea by the time his knife has gone through that tumor whether it is cancer. Use pure carbolic acid in the wound while waiting for the frozen section report. I am pretty certain it is cancer when I do that, but to me that is the safe way.

If it does not happen to be cancer, the carbolic acid does not burn deeply and you remove that segment of the breast which contains the tumor.

I have seen tragedies in cancer work where tumors of the breast, or what was supposed to be tumors, were excised by a surgeon, submitted to a laboratory at some distance. They received a report it was not cancer. The patient was assured, the surgeon felt safe, and what the surgeon got was not the tumor, what the patient had was cancer, from which she soon died.

It is sometimes difficult to identify tumors of the breast, particularly under local anesthetic, and, if you have a small tumor, it is easy to miss the tumor when you go to take it out. I realize this so much that I do not make any attempt to get the tumor. I locate the portion of the breast which contains the tumor and remove the segment so I am positive I have not only the tumor but have the neighboring tissue as well.

As to the question of grading, to me this is just something else to talk about. It is not new at all. It dates from earliest pathology. Virchow pointed out that malignant tumors in which the cells were very highly differentiated, which more or less resembled the tissue from which the tumors arose, were relatively slow growing. They formed metastasis late and were not nearly as malignant as the tumor which contained cells which were very nearly the embryological type of cell from which that tissue originally sprung.

Of course, there are all grades between these. What Broders has done is to give us a very simple way of saying what Virchow said many years ago. We can at once form a mental picture when we say this tumor is Grade 1. We have a picture of a tumor very highly differentiated that closely resembles the tissue from which it sprung and reforms the structure of that tissue.

When we speak of Grade 3 or 4, we at once realize the tumor has a great many cells which all look pretty much alike and we have a great many mitoses, and we know we are dealing with a highly malignant type of tumor.

From the prognostic standpoint, it is of great value. From the therapeutic standpoint, I think it is of no value to any one who is seriously concerned with the attempt to eliminate cancer from the individual patient.

In my own practice, it makes no difference whether the tumor is Grade 1 or Grade 3 or 4,—proceed with exactly the same treatment.

I have shown in our series of cases at Barnard Hospital we do occasionally have a five-year cure in a Grade 4 tumor, and I can show metastases that have occurred early in cases that were graded one.

Of course, these are exceptions. They are not rules, but they do occur, and, as long as they do occur, I feel that every case should receive the benefit of the very best that we have to give it.

Dr. Stovall: I did not want to say anything further, but I am going to say this.

It seems to me it is true, when you call in a pathologist to assist you in a diagnosis, you have called in a clinician. You have not called in a technician, any more than you are a technician, and you should treat him as such because he requires, for the microscopic diagnosis of his tumor, for the recognition of the kind of disease from which the patient is suffering, clinical information.

Diagnoses are not made on the basis of pure psychology or pure morphology. I could stand up here and recite case after case to you that is not so.

A man may be exceedingly proud of his ability to recognize cells, because of their morphology, their staining reaction and so forth, and he may be very proficient in that but he cannot use that method alone and make clinical diagnosis. It cannot be done, and I do not care how good he is.

That means when you consult your pathologist you are consulting a clinician and should take him into the case with you. That means that when you use him, if he is at a distance where he cannot view the case with you, give him as good a view of that case as you possibly can, when you submit the tissue, by giving him a clinical history to guide his interpretation of what he sees in the microscope.

Dr. Bannen made reference to another thing. He inferred that the fact the tumor had been biopsied had probably resulted in a metastasis and was, therefore, the cause of such a high death rate following the biopsy.

I would put a different interpretation on that. The facts probably are that those patients were seen so late they already had metastasis before the surgeon laid his hands on them. Personally, I do not have any fear of biopsy disseminating disease if the man who does the biopsy is a good surgeon and does not manipulate and massage his tissue while he does the biopsy.

It must be remembered that lesions removed adjacent to malignant tissue may and not frequently

do not show malignant change. I have found the surgeon is frequently timid in going in and removing a piece of tissue from the lesion which is the characteristic and the most attractive picture in the whole set-up as far as the patient is concerned because they say he may bleed if we go in and there may be some cause for that.

But the surgeon should be sure, if he takes a biopsy, he goes directly into the tissue which has excited his suspicion, so that he gets a report from the pathologist on the tissue, on the lesion which has excited his suspicion of malignancy. If he is not going to do that, do not depend on a biopsy. Go along without your biopsy.

In Wisconsin, the organization of our campaign during the coming year, in my opinion, should be along two lines, first a definite postgraduate medical education on the diagnosis of cancer and the treatment of cancer, the recognition of pre-cancerous and cancerous lesions to extend throughout the state to the profession.

A collateral campaign informing the public of the necessity of seeing the doctor before the lesion is cancer.

The practice of medicine in the next twenty-five years, in so far as it concerns the control of disease, means the early recognition of disease or the recognition of incipient disease, and that means the patient must get into the doctor's office. So one campaign without the other is worthless.

Dr. H. J. Farrell (Milwaukee): I feel, in regard to the statistics on skin cancer described by Dr. Smith, they are also a bit misleading. As Dr. Wieder said, the replies come from the hospital rather than from the dispensaries.

In connection with leukoplakia, I did not mean to imply that all patches of leukoplakia should be destroyed, but only those showing inflammation and growth. I feel that leukoplakia can be arrested in many cases by removal by irrigating factors. That is true of many of the lesions of the skin which I described.

I did not mean to imply that all the various types of nevus should be destroyed immediately on appearance, but those subject to irritation, the palms, soles, possible irritation from brassieres or shoulder straps or anything of that nature.

Dr. Joseph F. Smith (Wausau): Mr. Chairman, I think the remarks made in regard to high mortality of skin cases treated in hospitals as compared to those treated in the office is perfectly legitimate criticism.

There is no doubt about the fact that those cases which go to a hospital are very much further advanced and are more severe than those the doctor treats in his office.

Dr. Stovall: I would like to thank Dr. Fischel, in behalf of the group and the State Society, for consenting to come to us and to talk on this subject.

I hope that we can continue this activity until the whole Society becomes thoroughly interested in cancer, not interested in cancer above other subjects, but as an important medical subject.

Perforated Ulcer*

By JOSEPH DEAN, M. D.
Madison

INFLAMMATORY lesions of the duodenum produce three major complications.

1. Hemorrhage
2. Obstruction
3. Perforation

In the time allotted to me I will deal with the last complication, viz., perforation. Acute perforating ulcer of the duodenum was first described by Joseph Penada of Padua in 1793 as follows:

"Four finger breadths below the pylorus, i.e., at the commencement of the duodenum, there presented to my eye, a very singular, oblong hole, resembling an incision made with a knife. It measured eight lines in length and in breadth about two. The external edge of this cleft, or, one should describe it as a peculiar morbid ulcer, was of considerable thickness. To the touch it was sensibly hard and somewhat indurated and was turned in upon itself in a wart-like fashion, thus indicating that this peculiar induration was not of recent origin. The callus lips of this perforation were surrounded by a zone or rather a reddened area, which reached out for about an inch around the ulcer and shading gradually into a lighter color, extended upwards to the pylorus and for a less considerable distance below."

One hundred forty years later one can add but little to this description.

INCIDENCE

No age is immune to duodenal ulcer nor to perforation, cases being reported in in-

* Presented before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, September 1934.

fants only a few weeks old and as late as the seventh decade. Most perforations occur in the third, fourth and fifth decades. Five of our thirty-three cases were between seventy and eighty years of age. Two were under twenty. Perforating duodenal ulcers are peculiarly uncommon in females, a fact which is difficult to explain. In a recent review by Eliason of 2940 cases, his ratio was 31 males to 1 female. Three of our series were females. Perforations of gastric ulcers in females are more common than that of the duodenum. Repeated perforations in the same patient are of comparative frequency especially in the "ulcer habitus" type of patient. Nationality and occupation do not seem to have much, if any, influence on the incidence of perforation. Seasonal recurrences of both gastric and duodenal ulcer, of course, take their toll from perforations.

Pathology. We are concerned with two types of perforations, one the classical free perforation into the general peritoneal cavity and which constitutes a true surgical emergency and the slower or sealed perforation which usually occurs on the posterior wall of the duodenum and is protected by the head of the pancreas, gastrohepatic membrane or other peritoneal fold, from soiling the peritoneal cavity. Both acute and chronic ulcers perforate. Stenosed ulcers perforate, and, contrary to many opinions, bleeding ulcers likewise perforate.

The majority of perforations occur in the first four centimeters of the anterior wall of the duodenum and vary in size from a few to ten or twelve millimeters in diameter. The posterior perforating ulcers adhere to the pancreas or other neighboring structures and therefore do not cause the acute catastrophe of those perforating into the free peritoneal cavity. Pathologically, there is no difference between the two except in location. Why so many of these acute perforating ulcers heal, after the simplest operation closure, has given rise to much conjecture, but the fact remains that at least 25% heal permanently with no return of ulcer symptoms. The anterior perforating ulcer presents an entirely different surgical problem than the posterior with no great difference in the pathology.

Mortality. A most extensive survey of perforating ulcer given recently by Eliason in the American Journal of Surgery, covers 5061 cases with a mortality rate of 24.7%. The importance of time intervening between perforation and operation brought out in his mortality rates was striking. In those cases operated before six hours, the mortality was 7.5%; 6 to 12 hours 23%; 12 or over 32%; 12 to 24 hours 35%; 24 hours 57%; 24 to 48 hours 67.5%; 48 hours or over 66%. In the last 33 cases of ours, 32% died. Of those patients dying from perforated ulcers, general peritonitis kills 60%; 16% die from pulmonary complications and the balance from subphrenic or hepatic abscesses, disruption of the operative wound with evisceration of the intestines, intestinal obstructions and other complications.

Chief factors influencing death rate are:

1. Time—with early recognition and operation, the death rate drops tremendously. In early perforations, cultures from the peritoneal cavity are usually sterile. After twelve hours this does not hold true.

2. Size of perforation and degree of soiling of peritoneal cavity.

3. Type of operation done, the mortality increasing with the extension of the operative procedures.

SYMPTOMS

An acute exacerbation in the symptoms of a chronic gastric ulcer can usually be elicited in about 80% of perforated cases and more careful questioning later would unquestionably raise this percentage. While there are no doubt perforations in cases without any definite ulcer history, this percentage is not as high as some authors would lead us to believe. The onset of a perforation is accompanied with sudden severe agonizing burning pain beginning in the epigastrium in 85% of cases. It usually spreads rapidly throughout the abdomen and is followed by typical boardlike rigidity. This rigidity is more marked on the right abdomen in duodenal perforations due to the gastric contents flowing over the hepatic flexure of the colon and down over the caecum. In no other disease is the fixed boardlike rigidity of the abdominal wall found so early after the onset of

pain as is found in perforations of peptic ulcers. In no other acute surgical abdominal crises is the patient so prone to remain in such a fixed position. Tenderness will immediately follow rigidity. The severe pain is no doubt due to the acute chemical peritonitis. The temperature at first is subnormal rising with the reaction from peritonitis. Distention and tympany develop with the progress of peritonitis. Intestinal peristalsis is absent. The pulse rises but true surgical shock is not present. Free fluid may or may not be found depending upon the presence or absence of food and fluids in the stomach at the moment of perforation. Vomiting usually occurs and is unfortunate in that it forces gastric contents through the perforation. As the sudden insult to the peritoneum passes off, these patients become somewhat more comfortable but still retain their rigid immobile abdomen so characteristic of this disease. Liver dullness is hard to elicit and pneumoperitoneum the rule, but not always present.

Diagnosis. A patient with a pre-existing gastric ulcer history who suffers from an agonizing prostrating abdominal pain accompanied by a rigid unyielding abdomen, gives sufficient evidence of a perforating viscus and a positive indication for early surgical intervention. A refinement of diagnosis matters but little to the patient if early operation is done but every hour of delay reduces his chances of recovery.

TREATMENT

Many and varied methods have been advocated and done with warm adherents of each method. Many of these perforations can be prevented if the internist would refer to the surgeon for treatment those cases which show a progress of the ulceration in spite of dietary and medical management. Among the methods advocated in the treatment of perforated ulcers are:

1. Simple closure. This should be the method of choice, in fact, is, by a great number of surgeons in this surgical emergency. It is quickly and easily done, has the least mortality, and definitely and positively cures about 25% of the ulcers. At best the operation is done under adverse circumstances and the least surgical procedure which will save the life of the patient, is the one that should be done. If in closure of the perforation, a stricture or obstruction of the duodenum results, then only should a gastroenterostomy be done, or better still, a pyloroplasty.

2. Pyloroplasty should be the second choice. Done after the method of Judd, Finney or Horsley, it adds only a few more minutes to the operation, and, as the majority of these perforations are on the anterior surface of the duodenum and easy of access, this operation permits the removal of the ulcer, early and easy drainage of the stomach, and is an insurance against future duodenal stenosis.

3. Closure plus gastroenterostomy has many advocates, especially if the operation is done early. The chief arguments in favor of a gastroenterostomy are that the late results are better than after simple suture, that early drainage of the stomach is obtained and that many cases closed by simple suture require subsequent operative procedures. However, it must be admitted that every addition to surgical procedure has a corresponding increase in death rate, that the stomach can be kept emptied by the use of the Jute tube, with or without constant suction, and that additional surgery can be more safely done later when the patient is not suffering from an acute abdominal crisis. Further, the development of gastrojejunal ulcer following gastroenterostomy must not be overlooked.

4. Resection. Maintaining that resection is curative and that all other methods are purely palliative, some have advocated in a limited number of well selected cases this rather formidable operation. It seems much too radical to ever be permitted in the presence of peritonitis of any degree.

Drainage. The institution of drainage finds a surprising variety of opinions. The size of the perforation, the time of the perforation and the degree of peritoneal soiling should decide that problem. Many early cases without extensive soiling can be closed without drains as cultures from the peritoneal cavity are usually sterile the first

twelve hours. In late cases both suprapubic and flank drains are best.

CONCLUSIONS

1. Many perforations can be avoided by surgical treatment to patients not responding to medical management.

2. 90% of patients with perforated duodenal ulcers have a pre-existing ulcer history.

3. Time of operation is the chief factor in controlling death rate.

4. The simplest surgical procedure consistent with saving life should be the operation of choice.

5. Radical surgical treatment should be one of election.

6. Drainage of early cases may often be eliminated but never in late ones.

Mold Allergy; Its Importance in Asthma and Hay Fever*

By SAMUEL M. FEINBERG, M. D.

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ABOUT ten years ago Van Leeuwen[1] of Leyden, Holland, published his first paper suggesting to a highly skeptical world that asthma may be caused by the air-borne spores of molds. Since then a number of articles have appeared, dealing with the relation of molds to allergy. Many of these give a report of a single case and give distinctly the impression of a rare and unusual condition. Among these case reports are those by Cadham[2] due to grain rusts; Hopkins et al[3] due to *Alternaria;* Bernton[4] due to *Aspergillus fumigatus;* Cobe[5] due to a tomato-vine mold, *Cladosporium fulvum;* Credille[6] due to *Aspergillus fumigatus;* Vaubel[7] due to yeasts growing on plants.

Van Leeuwen [8, 9] persisted in his work and decided that many of the asthmas chiefly of climatic origin were due to "miasms", which he thought were the products of molds. In other instances he thought that the spores themselves were actually responsible for the symptoms. He even ventured the opinion that in many cases of sensitization and skin reactivity to certain allergens such as feathers, hairs and grains, the molds which infest these substances were actually responsible for these reactions. Hansen[10] of Germany, in 1928, estimates that 15 per cent of his asthma cases are due to fungi and bemoans the paucity of American literature on the rôle of fungi in asthma. In a later contribution he says[11] that 8 to 10 per cent of his cases of allergic asthma were sensitive to molds only and 15 to 20 per cent of all allergic cases were sensitive to molds in addition to other types of allergens.

In a group of 55 patients with chronic asthma, the majority of whom had no other positive reactions and 18 of whom reacted to dust, Flood[12] found five who reacted to fungi by intradermal testing. Balyeat[13] cultured the air in Oklahoma City and found only *Aspergilli and Penicillia.* He tested 480 cases by the scratch and intradermal method and found only 4 reactions. He concludes that molds are of rare importance in allergy.

Some of the recent reports dealing with fungi stress more emphatically their importance in allergy. Jimenez–Diaz et al[14] made a mycological and clinical study in Spain and conclude that many of the true cases of climatic asthma there are coastal and due to the existence of abundant fungi in the air and in household articles. Brown[15] has made the most extensive report on the relations of fungi to allergy, detailing the case histories of 24 such patients. Bernton[16] in his later paper, cites 8 cases of vasomotor rhinitis sensitive to fungi. In Port Sudan, Ellis[17], in investigating 50 cases of asthma, found that 42 gave good local reactions, using preparations of *Aspergillus niger* and *Penicillium glaucum.* Prince et al[18] tested 18 people in Galveston, Texas, with extracts of several molds and found 11 who gave positive reactions.

The majority of the above reports fail in one or more of the following particulars. There is a tendency to cite only a case or two,

* From the Allergy Clinic, Department of Medicine, Northwestern University Medical School.

emphasizing the rarity of mold allergy. In most instances there is no statement of the number of patients tested among which the positive reactions were found. In practically none of the previous articles does the author adopt routine use of fungus allergens in his skin tests.

Several years ago it occurred to me that the air-borne spores of fungi may play a much more important part in respiratory allergy than is generally considered. Among theoretical reasons for this idea were the ubiquity of these spores, their perennial presence in the air, their relatively small size (most of them being much smaller than pollen), their large numbers and their high protein content. Because these spores are cells having the property of reproduction they may reasonably be expected to contain potent allergens if we are to judge by the allergenic characteristics of such materials as pollen, egg-albumin and seeds and nuts. On the basis of the above considerations it was decided to employ fungus extracts in a routine manner in testing allergic cases, especially of the respiratory types.

The present report is based on the results of routine tests with fungus extracts on private allergic patients. The patients were not selected for testing with fungi for any particular reason but an attempt was made to make tests on all of them. In about half of the patients during this period the tests were not completed for various reasons: these are not included in the report. This was especially true in the case of many of the hay fever patients in whom the pressure of time, chiefly on the part of the patient, prevented a complete testing. The group to be presented were tested completely with foods, pollens and other inhalants in addition to the fungi. The report is based entirely on the result of scratch tests with powdered extracts, although in many instances intradermal tests were also used. These latter are not considered in this paper. This report is based on tests made with extracts of *Alternaria Sp., Aspergillus fumigatus, A. glaucus, A. Nidulans, A. niger, Chaetomium Sp., Monilia Sp., Mucor plumbeus, Trichophyton,* 3 species of *Penicillium* and several species of yeast. More recently other types of extracts

SUMMARY TABLE

Group 1:	Patients with respiratory allergy, seasonal or mostly seasonal	123
	Reacting to molds only	28
	Reacting to yeasts only	8
	Reacting to molds and yeasts	11
	Total number reacting to fungi	47
Group 2:	Patients with perennial respiratory allergy	120
	Reacting to molds only	12
	Reacting to yeasts only	5
	Reacting to molds and yeasts	4
	Total number reacting to fungi	21

Group 3: Allergic patients tested with yeasts

	Number tested	Reactors
From Group 1	123	19
From Group 2	120	9
Seasonal allergic patients tested with yeasts only	135	20
Perennial allergic patients tested with yeasts only	212	17
Total patients tested with yeasts	590	
Total in all groups reacting to yeasts	----	65

and other species have been tested but the results of these will not be embodied in this paper. Fungi other than molds and yeasts will not be discussed here.

Almost all of the patients here were of the respiratory type, i.e., either hay fever, vasomotor rhinitis or bronchial asthma. In analyzing the results it was thought advisable to divide the cases into two groups: one in which there was no seasonal variation in the symptomatology and another in which the symptoms were entirely seasonal or definitely aggravated during the warm months. The object of this classification was to see which, if any, of the fungi were likely to cause seasonal symptoms.

Group 1 consists of 123 patients with symptoms of hay fever or asthma in whom the complaints were either confined to a definite season or aggravated during some of the summer months. With the exception of two, all of this group were found to give reactions on skin tests. The majority of these patients had symptoms during the ragweed season and were sensitive to ragweed pollen. A number of the patients had ragweed pollen as their only form of pollen sensitization while their symptoms extended over several of the summer months—a fact which could not be attributed entirely to ragweed pollen. Some of the sufferers had summer symptoms without being able to set any definite dates of onset and cessation and were not sensitive to any pollen, as determined by cutaneous,

TABLE I

	Total reactions	Reacting alone	Alternaria	Aspergilli	Chaetomium	Penicillium	Mucor	Monilia	Trichophyton	Yeasts
Alternaria	29	10		12	10	5	2	5	5	9
Aspergilli	17	2	12		8	6	2	4	3	8
Chaetomium	16	2	10	8		6	3	4	3	6
Penicillia	7	0	5	6	6		1	3	2	4
Mucor	3	0	2	2	3	1		2	1	2
Monilia	6	0	5	4	4	3	2		2	2
Trichophyton	6	0	5	3	3	2	1	2		5
Yeasts	19	8	9	8	6	4	2	2	5	

Table I shows the fungus reactions in 123 patients of respiratory allergy in whom the symptoms were confined to, or aggravated during, the warm months. A total of 47 reacted to fungi, including 8 who reacted to yeasts as the only fungi. The total reactions for each group of fungi, the number of times each fungus group reacted alone and the associated reactions are shown in the table. Attention is called particularly to the large group reacting to *Alternaria*.

TABLE II

	Total reactions	Reacting alone	Alternaria	Aspergilli	Chaetomium	Penicillium	Mucor	Monilia	Trichophyton	Yeasts
Alternaria	5	1		4	2	1	3	1	1	4
Aspergilli	8	1	4		4	2	3	1	1	4
Chaetomium	5	0	2	4		1	2	2	1	3
Penicillia	4	1	1	2	1		2	1	1	1
Mucor	6	2	3	3	2	2		1	1	1
Monilia	2	1	1	1	2	1	1		0	1
Trichophyton	2	1	1	1	1	1	1	1		1
Yeasts	9	5	4	4	3	1	1	1	1	

Table II shows the fungus reactions in 120 patients with perennial respiratory allergy. In this group 72 were shown to be allergic by skin test to one or more allergens. A total of 21 reacted to fungi, of which 5 reacted to yeast as the only fungus. The total reactions for each group of molds and their associated reactions are shown in the table.

intra-cutaneous, conjunctival, nasal, tracheal insufflation or therapeutic test. A few volunteered the information that frost was not sufficient to stop their symptoms but that it required an actual blizzard for that effect. All in all there was presumptive evidence in many to indicate that factors other than, or in addition to, pollen were responsible for their allergic attacks. Of this group of 123 there were 39 who reacted to molds or to molds and yeasts and 8 to yeast only—47 in all. Group 2 consists of 120 patients in whom the symptoms were either the same the year round or not aggravated during the summer months. Of this number 72 were found to be allergic as determined by skin tests. In this group 21 reacted to fungi—16 to ordinary molds (and yeasts) and 5 to yeasts alone.

Table I presents an analysis of the fungus reactions in the first group of patients whose symptoms were entirely seasonal or aggravated during the summer. It will be noted that a total of 47 in this group reacted to fungi—39 to molds alone or molds in addition to yeasts and 8 to yeasts alone. The total number of reactions to each individual fungus group is tabulated. No attempt is made at this time to classify the reactions to each species, although in several of the gen-

era only one species was used in testing. A column is also given showing the number of reactions occurring in each fungus group without any associated reactions to other fungi. There is also shown the cross reactions of the various fungi. Thus we read from the table that *Alternaria* reacted a total of 29 times, 10 times alone, 12 in association with *Aspergillus*, 10 with *Chaetomium*, 5 with *Penicillium*, etc. In the column of *Monilia* we see that there were a total of 6 reactions, none reacting alone, 5 in association with *Alternaria*, 4 with *Aspergillus*, 4 with *Chaetomium*, 2 with yeasts, etc.

Table II shows a similar study in the group of cases whose symptoms were perennial without any aggravation during the warm months. The total number of patients who reacted to fungi were 21, of which 5 reacted to yeasts only. It will be seen that in this group of 120 patients the percentage of those reacting to fungi was considerably smaller than in the first group. However, the discrepancy is not as great when we consider the fact that in group 2 there were only 72 patients who could be proven to be allergic by skin tests. Many of group 2 were instances of asthmatic bronchitis and similar conditions in which skin tests are usually negative. The percentages of reactions with the various fungi are approximately the same as in the first group in Table I, with one outstanding exception. *Alternaria* seems to react much more frequently in the patients in group 1 than in group 2. There is reason to think from an analysis of these tables and observations of individual cases that the Alternaria fungi play a particularly prominent rôle in the causation of symptoms of hay fever or asthma during the warm months, either in association with pollen allergy or entirely by themselves.

DISCUSSION

A study of our case histories and tables gives room for a number of speculations. Cross reactions due to related allergens among the various fungi, the possible correlation of various seasons with certain groups of fungi, the predominance of certain fungi in certain environments, the association of fungi with climatic conditions — these and similar factors are being studied and will be discussed at a future time.

The point we wish to make now is that reactions to fungi are not rare or unusual. They are quite common and just as important as many of the other groups of allergens. Although it is true that we have not proved in every case reacting to skin test that the fungi were the actual cause of the symptoms, we have succeeded in doing so in a fair proportion of the cases. This was done by means of history, systemic reactions by subcutaneous injection and by therapeutic response to desensitization. It may also be mentioned here that in every instance of definite reaction to fungi a positive passive transfer was accomplished when tried.

In many of the instances of yeast allergy it was found that relief of symptoms occurred when yeast (as represented by bread, cake, crackers, beer, near-beer, wine, etc.) was omitted from the diet. Whether yeast is frequently an inhalant allergen remains to be determined. It may also be mentioned here that in another series of patients not included in this report on whom yeast tests were made (but no other fungi) similar proportions were found in the positive reactions. In 135 seasonal cases 20 reacted to yeast and in 212 non-seasonal cases, of whom 123 were proven to be allergic by skin tests, 17 reacted to yeast. The non-seasonal group included also instances of urticaria, eczema, etc. We are thus reporting here in the combined series a total of 65 patients who were sensitive to yeast. The greater incidence of yeast-sensitive patients reported here as compared to my previous report[19] is due to the fact that several species of yeast were used.

A word or two should be said about the relationship of dust and mold allergy. Although our figures are not sufficient to make any dogmatic statements certain tendencies are apparent. When dust tests were made practically every fungus-sensitive patient was sensitive to the former. On the other hand, while many of the dust sensitive patients reacted to fungi there were about as large a number who failed to react. This finding would support the contention that two types of allergens are present in house

(Continued on page 288)

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« « « EDITORIALS » » »

Prostatectomy or Transurethral Resection

DURING the past two decades a gradual improvement in the mechanics of methods for transurethral vesical neck resection has been accomplished. Concurrent improvement in visibility has interested an increasing number of urologists in the cystoscopic attack on bladder neck obstructions. But the more recent development by electrophysicists of electrical currents capable of cutting with facility and of coagulating effectively to control hemorrhage has given the greatest impetus to the popularization of the procedure. Within the past three years in several large centers transurethral resection has entirely supplanted prostatectomy. In other quarters there is adherence to the old methods of suprapubic or perineal prostatectomy, which, with all the refinements, have reached a high degree of perfection.

At the recent meeting of the Chicago Urological Society, January 24, 1935, a symposium on prostatic resection was participated in by nine members. Their dissertations revealed that the management of prostatic obstruction is far from standardized. The various operators fall into three classes as follows: A few are enthusiastically in favor of resection for all forms of obstruction, notably Kretschmer; a few adhere almost entirely to prostatectomy; while many steer a middle course attempting to achieve wise selective adaptation of method to the various types of obstruction.

There is practically complete agreement that resection is the preferable method for canalization of prostatic carcinomata, small middle lobe hypertrophies and fibrous bars and contractures. Moreover, there is apparent, from available reports, a slightly lower mortality rate and a definitely shorter period of hospitalization in favor of resection methods. Corbus, O'Conor, Koll, McKenna and White favor prostatectomy for large adenomatous glands, especially in good surgical risks. Herbst, who recently has used resection almost entirely, believes that in very large hypertrophies he could have obtained better results with prostatectomy, and plans on returning to enucleation in certain cases. It is well to note here that after vast experience and extensive travel, Bumpus recently stated that if a sufficient amount of tissue cannot be removed from the vesical neck at a single sitting to allow easy emptying of the bladder, it would seem preferable to do a prostatectomy.

Against prostatic resection there exists the objections of the possibility of recurrence of the obstruction, the likelihood of leaving potentially malignant gland tissue, the occurrence of persistent infection and in-

continence. While rabid resectionists are apt to magnify the incidence of recurrences of obstruction after prostatectomy—as a matter of fact, it is rare. On the other hand, it is only reasonable to anticipate that when a sizable part of a growing gland is left in situ obstruction may recur. Enucleation, no doubt, in many instances has precluded the future development of malignancy in a location where it is prone to develop. Also the actual eradication of early low grade circumscribed malignancies has been accomplished while resection would leave the gland to degenerate into carcinoma. Culver pointed out that great difficulty is encountered in making accurate diagnosis from the resected pieces of tissue because of the distorting and destructive action of heat, thus detracting from its value as a diagnostic measure. O'Conor and numerous others are annoyed by a prolonged persistence of infection with a turbid urine. That infection is created or exaggerated in the gland during resection is substantiated by Boyd's histologic examination of glands removed after resection and by Caulk's thermic measurements of gland tissue adjacent to the electrode. Thompson, who has performed a great number of resections, has devised a method of opening and draining the pus pockets with the aid of fulguration. Incontinence, while rarely permanent, occurs frequently and is quite persistent at times.

To minimize and eliminate these objections there is a growing cognizance of the importance of scrupulous asepsis. Also great care in the manner of irrigation, control of hemorrhage, extent of excision and other highly technical points are stressed as essential prerequisites to good results. Moreover a background of extensive cystoscopic experience and performance of a large number of resections are deemed necessary before sufficient technical skill and good end results are attainable. It is considered mandatory that the procedure be confined to trained and experienced cystoscopists.

The general surgeon who has perfected the technique of prostatectomy may well continue and hold his head high. Certainly the occasional cystoscopist will not do well with transurethral resection.

Until more reports of proven late results are accumulated, the various methods of resection must not be condemned by prostatectomists. It is still a new method; improvements are inevitable. Time will bring an appraisal of the late end results and a definition of its exact range of applicability. Likewise enthusiasm for the resection method should not lead to condemnation of the method of prostatectomy in which there has been reached a high degree of perfection by many operators. The best interests of the patient are not fairly respected when resection is advocated because it is more easily sold to the patient. Vice versa, the prostatectomist who is not adept at resection is unreasonable in submitting certain patients to open operation when the transurethral attack is more expedient. A conservative tolerant attitude on all sides, having as our dominant motive the welfare of these elderly patients, will ultimately bring us to a proper evaluation and application of methods. W. M. K.

The Aid of Modern Weapons

"The treatment of tuberculosis must in all cases be based on diagnosis. Only a doctor can decide whether treatment is necessary and how it should be carried out."

THIS is the underlying principle and aim for the 1935 educational campaign of the National Tuberculosis Association and its affiliated state and local organizations which is scheduled to begin April 1. As always the importance of early diagnosis is urged in order that treatment can be started promptly with more prospect of a cure, or at least of arresting the disease.

Our knowledge of the treatment of tuberculosis has made tremendous strides in the last decade, and it is timely to inform the public more fully of the advantages and possibilities of these "modern weapons" collapse therapy.

Collapse therapy—including artificial pneumothorax, temporary or permanent paralysis of the diaphragm, thoracoplasty, etc., —is no longer on trial. These various methods, either singly or in combination, when used as aids to the well-recognized sanatorium care, have demonstrated their value in thousands of cases.

Unfortunately, however, much of this knowledge is confined to the walls of the sanatorium and to a very small group of physicians especially interested in tuberculosis. In order that the public be better informed of the merits of this type of treatment, it is necessary that the medical profession as a group—the teacher of the public in all matters pertaining to health—first inform itself more thoroughly. The average physician has all too often but a very hazy idea of the fundamental principles involved and the practical application of these methods.

To this end we should like to suggest and urge physicians to become a little better acquainted with the sanatorium in their own or neighboring county. The physician in charge will welcome your visit and be proud to show you the results obtained by means of collapse therapy.

County Medical Societies should make it their business to meet at their county sanatorium at least once or twice a year, and have demonstrated the indications and results of these "modern aids". With more exact knowledge and a better understanding, the doctor will be in a far better position to advise his patient intelligently and to give to the public the important and valuable knowledge. O. L.

Foot Disorders

AN INTERESTING fact has recently been called to our attention. People suffering from foot trouble and hoping for advice and relief from their family doctors, have been gradually turning to the less qualified type of practitioner with their ailments. It is only natural that the great shoe manufacturers, finding this to be the case, should take advantage of it. They have done this with an intensity and on a scale large enough to cause us to feel the necessity of bringing the matter to the attention of the profession.

The writer took a foot patient of his to a shoe store intent on finding a certain type of shoe which was necessary for the comfort of the patient's foot. The shoe salesman, after examining the patient's foot and bringing out several designs or models, said, "I know exactly what your foot needs; it needs a so-and-so orthopedic corrective shoe". The patient said "No," he wished a certain kind as had been described by me. At this the shoe salesman took affront and said that he was well qualified to know the type of shoes that patrons entering his shop needed, at which my patient said, "This is my doctor who is with me". Undaunted, the shoe salesman, pointing to a certificate hanging on the wall said, "I am very glad to know you, Doctor. You see, I am a foot specialist too, and I am sure you will agree with me that the kind of shoe I have mentioned is the proper thing for your patient's foot".

This interested me, and upon investigation the following facts were disclosed: First, that one large manufacturer gives a certificate which states that the salesman has taken a course which in a certain way qualifies him for the diagnosis and treatment of foot disorders. Another large retailer in collaboration with several manufacturers with whom he was doing business held a state-wide school for the fitting of corrective shoes, at the same time advertising his own designs, which he is pushing quite actively. A third type of procedure is for a company to send out what is known as a "specialty man" to teach the salesman. Usually it is the manufacturing companies which do not manufacture orthopedic shoes but who give the name of orthopedic or corrective shoe to some particular design which their salesman detail.

Even the government has observed and is taking a hand in the correction of this nation-wide fault, for only recently sixteen firms were called on the carpet for either advertising as orthopedic shoes ones that had no orthopedic value, or else attaching to such shoes a doctor's name to lend weight in the sale of such.

The writer believes it is important for physicians who are approached on the subject of foot disorders to either brush up on their knowledge of treatment, or, instead of allowing the patient to drift into the hands of salesmen who have attended a three weeks' school on foot disorders, to refer them to men who are directly identified with the orthopedic specialty in medicine.—H. W. V., Jr.

. . . . THE PRESIDENT'S PAGE . . . .

Careful Consideration

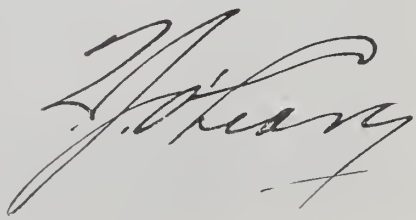
SINCE the special meeting of the House of Delegates of the American Medical Association in Chicago in February of this year, there has been considerable agitation in reference to county plans or local plans in regard to voluntary budgeting, due to the sanctioning by this body of voluntary budgeting for the care of the sick. The Reference Committee at the special session emphasizes that "the primary considerations of the physicians constituting the American Medical Association are the welfare of the people, the preservation of their health and their care in sickness, the advancement of medical science, the improvement of medical care, and the provision of adequate medical service to all the people. These physicians are the only body in the United States qualified by experience and training to guide and suitably control plans for the provision of medical care. The fact that the quality of medical service to the people of the United States today is better than that of any other country in the world is evidence of the extent to which the American medical profession has fulfilled its obligations."

From the above quotation it is clearly and precisely stated that the efforts of the physician have been directed towards the welfare of his patients and the widening of the scientific knowledge of medicine.

In this new movement the welfare of the physician, upon whom the public must depend for scientific treatment, should receive well thought out consideration. This is not a time for speedy conclusions. Hasty action may have far reaching effects. It may be easy to put a plan into motion, but if it is not well grounded, it will soon fall apart, carrying discredit to the originators. Since any voluntary budgeting plan deals with the wage-earner, it must be so built that it may be carried on in the future when our economic situation returns to a normal plane, which I am firmly convinced it will do in the near future. Once the low income group learn of the ease with which they can handle their distressing situations, they will be slow to withdraw from the group plan. It is with this thought in mind that I would advise a budgeting system that is workable in times of economic stress and in times of affluency.

The Executive Committee of the Council is to meet with Dr. R. G. Leland, Director of the Bureau of Medical Economics of the American Medical Association, the first part of April. We hope out of this conference will come the foundation material for a sound workable plan or plans that may be accepted uniformly throughout the state, the plan to be modified for the individual counties. The result of this meeting will be dispatched speedily to each component society. Any county formulating plans at the present time should await the outcome of this conference.

I am not convinced that all physicians who sense that something different is necessary or imminent, are able to predict clearly the ultimate results of certain schemes either in operation now or proposed. The adoption of a hastily conceived plan may result in the loss of much that the medical profession has taken decades to gain. I conceive it our duty continuously and vigorously to oppose every suggestion which does not substitute something better for that which it displaces. Nothing can be gained merely by making a change.



Society Proceedings

DANE

The last meeting of the Dane County Medical Society was held jointly with the American Congress of Physical Therapy of the midwestern section on Tuesday, March 12th. This was a full day session, the morning meeting being held at Wisconsin General Hospital, and in the afternoon at Service Memorial Institutes building. A dinner was served in the Park Hotel at six o'clock at which time the University of Wisconsin Glee Club sang. Many prominent physicians from the middle western states were speakers at the meeting. N. T.

FOREST

At a meeting of the Forest County Medical Society, the following officers for the ensuing year were elected: President, Dr. E. G. Ovitz, Laona; Vice President, Dr. G. W. Ison, Crandon, and Dr. E. W. Huth, Crandon, Secretary and Treasurer.

JEFFERSON

Dr. Arthur G. Sullivan, Madison, gave an interesting and instructive address on "Legal Pitfalls in the Practice of Medicine and Their Solution" before a meeting of the Jefferson County Medical Society held on March 21st.

MILWAUKEE

The March meeting of the Medical Society of Milwaukee County was held at the New Milwaukee County General Hospital on the 8th. The following program was presented:

"The Treatment of Megacolon by Lumbar Sympathectomy" by Stanley J. Seeger, M. D.

"Prognosis and Treatment of Cutaneous Melanoma" by H. J. Farrell, M. D.

"Presentation of a case: Progressive Muscular Dystrophy" by H. O. McMahon, M. D.

This was followed by the social hour.

About three hundred twenty-five members attended the February meeting of the Society held on the 8th at the Milwaukee Athletic Club. The following program was presented:

"Infections of the Hand" by Sumner L. Koch, M. D., associate professor of surgery, Northwestern University.

"The Role of Autopsies in Medical Progress" by William A. O'Brien, M. D., associate professor of preventive medicine, public health, and pathology, University of Minnesota.

Dr. Koch's paper was discussed by Dr. T. S. O'Malley while that of Dr. O'Brien was discussed by Dr. Norbert Enzer.

OUTAGAMIE

The March meeting of the Outagamie County Medical Society was held Thursday, March 28th, at the Conway Hotel, Appleton.

Dr. Louis A. Buie of the Section of Proctology of the Mayo Clinic, was the principal speaker, his subject being "The Diagnosis and Treatment of Anal and Rectal Diseases." Moving pictures showing operations on fistula and hemorrhoids were also shown.

POLK

The regular meeting of the Polk County Medical Society was held at Clear Lake and were the guests of Dr. H. C. Caldwell.

Dr. J. H. Simons of Minneapolis was the speaker of the evening. He gave a very interesting talk on "Eclampsia."

Drs. L. Waterman and L. V. Bergstrom, two new physicians at Amery, were admitted into the Society.

After a general discussion of epidemic diseases in the county the meeting adjourned.

On Saturday, March 2nd, the Polk County Medical Society was the guest of Dr. J. A. Riegel, St. Croix Falls, to a fish dinner and social evening. Dr. R. G. Arveson of Frederic who is spending the winter in Florida sent a batch of fish for the society. From all indications everyone had a very enjoyable time. E. C. S.

RACINE

The February meeting of the Racine County Medical Society was held on the 21st at the Elks' Club.

A very interesting talk on "The Labile Heart" was given by Dr. Otto Saphir, pathologist at the Michael Reese Hospital. Dr. Francis D. Murphy, Milwaukee, addressed the members on "The Etiology and Diagnosis and Management of Acute Nephritis" and its relation to the later development of chronic nephritis.

Dr. John Docter, chairman of the committee on medical economics, presented a report of his committee with recommendations. A. M. L.

RICHLAND

At the last meeting of the Richland County Medical Society held on March 14th, the Society was addressed by Dr. F. E. Schneiders of Madison on the subject of "Early Diagnosis and Treatment of Cancer of the Breast, Cervix, and Uterus."

Physicians from Iowa, Grant, and Vernon Counties were also present and all reported a very worth while meeting. G. B.

ROCK

The regular February meeting of the Rock County Medical Society was held at the Monterey Hotel in Janesville on Tuesday evening, February 26th. There were forty physicians present.

President Kasten asked that members of the Society who wished to place themselves at the disposal of the Woman's Auxiliary as speakers on health subjects, to submit their names and the subjects on

which they are qualified to speak, for the purpose of creating a speakers' bureau. There was considerable discussion concerning the broadcasting of health talks over Station WCLO, Janesville, and a motion to set up a county board of radio censors was carried.

Dr. P. A. Fox, Beloit, reported for the Public Health and Legislation committee that the antivivisection bills were likely to be killed in committee.

Dr. James G. Carr, professor of medicine, Northwestern University Medical School, presented an excellent paper on "Coronary Thrombosis." Slides of typical and atypical electrocardiograms in this disease added to the effectiveness of the paper. C. N. N.

SHAWANO

At a meeting of the Shawano County Medical Society held Wednesday, February 20th, the following officers were elected: President, Dr. E. L. Schroeder; Vice President, Dr. L. W. Peterson, Secretary-Treasurer, Dr. A. A. Cantwell, all of Shawano. Delegate, Dr. A. J. Gates, Tigerton; Alternate Delegate, Dr. L. W. Peterson; Censor for three years, Dr. C. E. Stubenvoll of Shawano. A. A. C.

TREMPEALEAU-JACKSON-BUFFALO

The February meeting of the Society was held at the MacCornack Clinic, Whitehall, following a dinner at the Stuve restaurant.

Papers on the treatment of arthritis were presented by Dr. C. O. Rogne of Ettrick and Dr. F. T. Younker of Galesville. Dr. F. P. Daly, Chippewa Falls, deputy state health officer, spoke on communicable diseases.

WAUKESHA

The regular monthly meeting of the Waukesha County Medical Society was held on March 6th at the Majestic Hotel, Oconomowoc.

The Woman's Auxiliary to the County Medical Society met at the same time to hear Dr. H. J. Farrell of Milwaukee, who spoke on "Hygiene of the Skin."

WOOD

The annual meeting of the Wood County Medical Society was held at Wisconsin Rapids on March 12th and the following physicians were selected for office for the ensuing year: President, Dr. K. H. Doege, Marshfield; Vice President, Dr. Otto Backus, Nekoosa; Secretary-Treasurer, Dr. W. G. Sexton, Marshfield. The delegates were re-elected with Dr. F. X. Pomainville, Wisconsin Rapids, as Delegate and Dr. K. H. Doege as Alternate.

MILWAUKEE ACADEMY

The following program constituted the meeting of the Milwaukee Academy of Medicine on March 19th:

1. Presentation of clinical cases, specimens and roentgenograms.

2. "Prophylaxis and Treatment of Scarlet Fever by Convalescent Serum" by Dr. Wm. Thalhimer of Chicago and Dr. Maurice Hardgrove, Milwaukee.

2. "Differential Diagnosis of Diseases of the Thyroid Gland" by Dr. Arnold S. Jackson, Madison.

MILWAUKEE NEURO-PSYCHIATRIC

The March meeting of this society was held on the 28th at the University Club. Following the dinner, Dr. James R. Regan spoke on "Delayed Ulnar Nerve Palsies of Traumatic Origin."

MILWAUKEE OTO-OPHTHALMIC

The March meeting of the Milwaukee Oto-Ophthalmic Society was held at the University Club on the 12th. A clinical meeting with exhibition of patients at six o'clock was followed by the dinner. A scientific program was then presented:

"Vascular Tumors of the Orbit and Their Treatment." Presentation of patient. (Entrance Thesis). by Dr. Alvin J. Brah. Discussion by Dr. Edward R. Ryan.

"Fitting of a Prothesis" by Paul Gougelmann.

NEISSERIAN MEDICAL SOCIETY

The American Neisserian Medical Society was founded on June 12th, 1934. It is dedicated to the promotion of knowledge in all that relates to the gonococcus and gonococcal infections, that there may be attained improvement in the management of gonorrhea and a reduction in its prevalence. There are 115 charter members and the officers are:

Dr. Edward L. Keyes, New York, Honorary President; Dr. J. Dellinger Barney, Boston, President; Dr. P. S. Pelouze, Philadelphia, Vice-President; Dr. A. L. Clark, Oklahoma City, Okla.; Dr. Walter Clarke, New York City; Dr. R. D. Herrold, Chicago; Dr. N. A. Nelson, Boston; Dr. Oscar F. Cox, Jr., Boston, Secretary-Treasurer—Executive Committee.

The society plans to carry out the following program:

A. The scrutiny of the management of gonorrhea in both male and female.

B. Clinical and laboratory research in the diagnosis, medical and social pathology, and the treatment of gonorrhea.

C. Dissemination among the medical profession and the public of authoritative information concerning gonorrhea.

Membership is limited to:

A. Residents of the United States or its territories, Canada or Mexico.

B. Graduates of a medical school recognized by the American Medical Association.

C. Those who are engaged in some phase of the management of gonorrhea.

Invitation to membership is extended to all qualified physicians who desire to work for improvement in the management of gonorrhea. Application blanks can be obtained from Oscar F. Cox, Jr. M. D., Secretary, 475 Commonwealth Ave., Boston, Mass.

THE WOMAN'S AUXILIARY

Mrs. Rock Sleyster, 1220 Dewey Ave., Wauwatosa, *President*
Mrs. F. Gregory Connell, 420 Washington Blvd., Oshkosh, *President-elect*
Mrs. George H. Ewell, 2024 Kendall Ave., Madison, *Secretary*
Mrs. Donne F. Gosin, 631 S. Quincy Ave., Green Bay, *Treasurer*
Mrs. R. W. Tomlinson, 1021 Park Place, Wilmington, Del., *National President*

ANNUAL MEETING CHAIRMAN

The appointment of the chairman for the seventh annual meeting of the State Auxiliary has been announced by the Woman's Auxiliary to the Medical Society of Milwaukee County. The chairman, a member of the Milwaukee County Auxiliary, has had marked success in arranging entertainment for the wives of physicians attending conventions in Milwaukee. She was general chairman of the annual meeting of the Woman's Auxiliary to the State Medical Society in 1932, and chairman of arrangements for the ladies at the National Convention in 1933. The efficiency of her work was highly appreciated.

The Auxiliary is again honored by Mrs. Louis M. Warfield's acceptance of the general chairmanship for the seventh annual meeting of the Woman's Auxiliary to the State Medical Society to be held in Milwaukee, September 17, 18, 19, and 20th.

SUGGESTION FOR OPEN MEETING

There is a very widespread fear of cancer, and, rightly so, because it is considered an incurable disease. This fear is the greatest single cause for delayed diagnosis. People stay away from physicians because they are afraid that the doctor may find that their disease is cancer. Before the medical profession can accomplish anything in its campaign against cancer it must dispel this fear and encourage people to consult physicians as soon as the first signs appear.

The State Medical Society has secured three film strip projectors, film strips and prepared manuscripts on the control and prevention of cancer. One of these film strips is entitled "The Life History of Cancer"; the other "Fight Cancer With Knowledge". These illustrated lectures are available to members of county medical societies who have an opportunity to address public audiences. Dr. W. D. Stovall, Chairman of the Cancer Committee of the State Medical Society says that *one successful way to get this opportunity is to have the local auxiliary arrange for a public meeting* and invite one of the local physicians to give the talk.

Through the American Society for the Control of Cancer, the State Society secured two film strips which treat the subject in different ways. One of these strips is entitled "The Life History of Cancer" (35 pictures); the other "Fight Cancer With Knowledge" (49 pictures).

If *local auxiliaries* cooperate with the Cancer Committees of county medical societies, a successful campaign against cancer can be planned.

Leaflets entitled "Facts and Fallacies about Cancer" will be furnished by the State Medical Society of Wisconsin upon request from the county auxiliaries. Address your letter to the State Medical Society of Wisconsin, 119 East Washington Avenue, Madison, Wisconsin.

COUNTY NEWS ITEMS

Brown–Kewaunee–Door

One hundred women enjoyed the first benefit card party of the Auxiliary to the Brown–Kewaunee–Door county medical society, in the home of the president, Mrs. John R. Minahan, Green Bay. A prize was awarded at each table, and tea was served at 4:30 with Mrs. O. W. Saunders and Mrs. R. M. Burdon presiding. Spring flowers and cakes in pastel icing made the table attractive. Proceeds of the party will be used for the auxiliary's philanthropic work. The chairmen of the party were Mrs. O. W. Saunders and Mrs. W. W. Ford.

Many pet superstitions regarding diseases were exploded by Dr. W. W. Bauer, Director of Health and Public Instruction of the American Medical Association, in an address called "Misconceptions that Make Mischief" before the Catholic Woman's Club on March 12th and another group of women at the Woman's Club on March 13th. This beneficial program was sponsored by the Woman's Auxiliary to the Brown–Kewaunee–Door Medical Society.

The physician members of the Brown–Kewaunee–Door County Medical Society and members of the Woman's Auxiliary attended a dinner at the Northland Hotel in February. Dr. Morris Fishbein, editor of the Journal of the American Medical Association, spoke to the group on the topic, "Changing Times".

Dane County

The Secretary of the Dane County Auxiliary, sent the following letter to wives of the members of the Dane County Medical Society:

The Woman's Auxiliary to the Dane County Medical Society is now entering its second year. To any who have not yet experienced our friendly, informal meetings, we extend a cordial invitation to membership. To former members we say "Come Again".

The Dane County Auxiliary made HYGEIA available to the pupils of two hundred and forty-four schools. Other worth while and interesting projects are under discussion for this year.

Luncheon meetings, some in the homes of members, have been held the second Wednesday of each month. Speakers, covering an interesting range of timely topics, have already been heard. Others are being invited to address future meetings.

Membership dues are one dollar per year. Individual luncheons have not exceeded sixty-five cents. The February meeting will be at the Park Hotel, Madison, on Wednesday the 13th at 1 P. M. Dr. E. L. Sevringhaus, Associate Professor of Medicine, of the University of Wisconsin, will speak on "The Glands of Internal Secretion".

We are hoping for a large attendance not only of the enthusiastic membership of 1934, but of those other women without whose presence the Auxiliary cannot be considered complete.

Won't you please fill out and mail the enclosed reservation so that it may reach the secretary by Monday, February 11th?

Sincerely yours,
MONA H. LYGHT (MRS. CHARLES),
Secretary.

Manitowoc County

Luncheon at one o'clock on February 20th at the Catholic Center preceded the regular meeting of the Manitowoc County Medical Auxiliary. Dr. L. W. Gregory was the guest speaker.

A benefit bridge party, with 23 tables in play, was held at the Catholic Center on Monday, March fourth.

Milwaukee County

Members of the Woman's Auxiliary to the Medical Society of Milwaukee County collected hundreds of "white elephants" for their sale on March 14th. The shop at 513 W. Wisconsin Avenue, where it was held, took on the aspects of a well run retail store. Radios, typewriters, old jewelry, hand painted china, golf clubs, lamps, silk shawls brought from Europe, old silver coffee pots, boots, books, knick-knacks, and hundreds of other articles were arranged on long tables for the auxiliary's white elephant sale.

The HYGEIA committee is endeavoring to extend the distribution of Hygeia to rural schools and social centers. In order to raise funds to accomplish this, the white elephant sale was held, with Mrs. William P. O'Malley as chairman.

Dr. William A. O'Brien, assistant professor of pathology at the University of Minnesota and well-known for his radio presentations, addressed the Auxiliary at its regular luncheon meeting on February 8th at the Y. W. C. A. Dr. O'Brien's subject was "The Modern Health Movement".

In announcing the Annual Meeting of the State Auxiliary in September, Mrs. Rock Sleyster, State President, asked that generous cooperation be given Mrs. L. M. Warfield, convention chairman.

> Anyone desiring the names and addresses of the state officers and chairmen together with the names and addresses of the 17 county auxiliary officers, should address the State Medical Society of Wisconsin, 119 E. Washington Avenue, Madison, Wis.

The Public Relations committee is making every effort to contact various lay organizations throughout the county and to cooperate with these organizations in presenting programs of health interest. During the month of February, the Public Relations committee placed ten speakers.

The Flower and Courtesy committee sold artificial rose buds as admission to a benefit bridge they sponsored on April first at the Marquette Women's League club house, 1559 N. Prospect Avenue, Milwaukee. Mrs. Roland Frederick was general chairman of the affair. Proceeds of the sale will be used by the committee to buy flowers and expressions of sympathy for members who are ill or bereaved.

The Auxiliary held a regular monthly luncheon meeting on Friday, March 8th at the Y. W. C. A., with Mrs. Harry J. Heeb, presiding. A St. Patrick's Day motif was featured. The Auxiliary was addressed by Dr. Arno B. Luckhardt, professor of physiology at the University of Chicago. Dr. Luckhardt, with Dr. J. Bailey Carter, is the discoverer of ethylene gas, widely used now as an anaesthetic. Dr. Luckhardt's subject was "The Value of Animal Experimentation," and was illustrated by lantern slides. The historical development of animal experimentation in the laboratory and the result achieved were particularly stressed by Dr. Luckhardt. Dr. Eben J. Carey, dean of Marquette Medical School, was among the guests.

The next meeting will be held on April 12th, at which time Dr. Carl Henry Davis will give an illustrated talk on his experiences in Norway and Russia.

The membership of the Milwaukee Auxiliary now totals 347.

Outagamie County

The Woman's Auxiliary to the Outagamie County Medical Society assisted the physicians in sponsoring an open meeting in February. Dr. W. D. Stovall, Director, State Laboratory of Hygiene, Madison, addressed an audience of nearly 700 persons at the Appleton high school auditorium on February 26th. Dr. Stovall is chairman of the Cancer Committee of the State Medical Society of Wisconsin.

Racine County

The Racine County Auxiliary held its February luncheon meeting at Hotel Racine, with Mrs. Frank Pope, president, presiding. The program included a short talk by Mrs. Russell M. Kurten, readings by Mrs. George Goepfert and vocal solos by Miss Jane

Nash. Dr. I. F. Thompson introduced the guest speaker, Mrs. Waters, who spoke on her travels in Russia.

The Racine County Auxiliary holds its meetings the second Tuesday of each month. The March meeting was an open meeting.

Rock County

Twenty-five subscriptions to HYGEIA were placed in grade schools throughout Rock County, also in two junior high schools, two parochial schools, Beloit college, Beloit Municipal Hospital, beauty parlors and public rest rooms.

Through the cooperation of the Beloit Federation of Women and church organizations, the Auxiliary affords Pinehurst Sanatorium with frequent entertainment. Included among the christmas gifts presented to the Sanatorium by the Auxiliary were two sewing machines for use of patients, an electric corn popper, and a floor lamp.

Monthly meetings are held alternately in Beloit and Janesville. The February meeting was held at the Woman's Club in Janesville, with the president, Mrs. T. F. Shinnick, Beloit, presiding. Mrs. Ada Rogers, Rock County Relief Administrator, gave an informative talk.

A joint meeting of the Auxiliary and the Medical Society was held at the Hotel Hilton, Beloit, on March 26th. Following the dinner, Dr. R. G. Leland, Director of the Bureau of Medical Economics of the American Medical Association, addressed the group.

Sheboygan County

The Sheboygan County Auxiliary held its March luncheon meeting on the 6th. Mr. Ferdinand Bahr, director of recreation for the city of Sheboygan, gave an address on the work being done. He gave statistics on the number of people taking advantage of the privileges offered by the Recreation Department in basketball, skating, volley ball, among children and adults.

The April luncheon meeting will be held at the Vocational School with the girls preparing and serving the luncheon.

News Items and Personals

Dr. R. G. Sayle, 75, of Milwaukee, recently observed the fiftieth anniversary of his medical practice. He began his practice at Hales Corners, Wisconsin, in February 1885, and came to Milwaukee in 1910.

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The following physicians who have recently been granted licenses to practice in Wisconsin have announced associations or permanent locations:

Dr. R. W. Walters, formerly of Battle Creek, Michigan, has become associated with Dr. G. A. Legault of Owen, Wisconsin.

Dr. Theodore J. Kern of Milwaukee has taken over the practice of Dr. Clemens Bossard, Richfield, Wisconsin, who has recently retired.

Dr. Theodore B. McCord, formerly of Milwaukee County General Hospital, Wauwatosa, is now associated with Dr. B. I. Pippin of Richland Center.

Dr. J. A. Rawlins who recently completed internship at Cook County Hospital, Chicago, is assisting Dr. W. A. Taylor of Portage.

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The office of Dr. G. W. Griswold of Alma Center was completely destroyed by fire on the evening of February 19th.

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Dr. Charlotte J. Calvert, director of the bureau of child welfare of the State Board of Health since 1929, resigned her position on March first. Her successor has not yet been announced.

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Dr. A. T. Hume, formerly of Hudson, has moved to Chetek where he has established his practice.

RADIO PROGRAM

Talks on health are broadcast over state stations WHA (Madison) and WLBL (Stevens Point) by the State Medical Society of Wisconsin each Tuesday, Wednesday and Thursday at 10:45 A. M. Schedule for the next month follows:

Tues.	April 9, 1935.	The Nervous Breakdown.
Wed.	April 10, 1935.	Too Much Sugar.
Thur.	April 11, 1935.	Things Men Fear.
Tues.	April 16 1935.	Preventing the Spread of Contagion.
Wed.	April 17, 1935.	Temper Tantrums.
Thur.	April 18, 1935.	Dietary Delusions.
Tues.	April 23, 1935.	Rickets.
Wed.	April 24, 1935.	Blood Pressure.
Thur.	April 25, 1935.	Machinery of Medicine.
Tues.	April 30, 1935.	Headache.
Wed.	May 1, 1935.	Science Saves Babies.
Thur.	May 2, 1935.	Treatment of Diseases by Sunlight.
Tues.	May 7, 1935.	Lister and the Development of Surgery.
Wed.	May 8, 1935.	Food Allergy.
Thur.	May 9. 1935.	Hospitals of Today.

Dr. Francis D. Murphy of Milwaukee spoke on March 7th before the Washington–Ozaukee County Dental Society at West Bend. His subject was "Mouth Lesions in Constitutional Disorders."

Dr. Adolf Wallner of Watertown left on March 25th for a stay of several months in Germany. He was accompanied by his wife and daughter, Hildegarde, and plans to return about July first. Dr. Wallner will also do postgraduate work in Vienna and Berlin.

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Dr. G. E. Forkin of Menasha has resumed his practice after an absence of six weeks. Dr. L. M. Cox of Chicago substituted for him during this time.

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On nomination of the State Medical Society of Wisconsin, Dr. William A. Werrell of Madison has been selected by the Industrial Commission as representative of the Society on the Commission's Heating and Ventilation Code Committee. Dr. Werrell was formerly director of the Civil Works Service in Wisconsin.

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Dr. M. V. Dewire of Sharon who has been a patient at a Madison hospital for the past three months is convalescing in his home in Sharon.

BIRTHS

A daughter to Dr. and Mrs. Carroll W. Osgood, Wauwatosa, on January 23rd.

MARRIAGES

Dr. D. F. Rikkers, Milwaukee, to Miss Rosella S. Torgerson of Milwaukee on March 2nd at Madison.

Dr. Paul A. Brehm, Milwaukee, to Miss Mary E. Harrison of New York City on January 21st.

Dr. Benjamin E. Urdan, Milwaukee, to Miss Marian Daneman, Milwaukee, on February 7th.

Miss Marion Regan, daughter of Dr. and Mrs. E. D. Regan, Milwaukee, and Phillip C. Hanson, Milwaukee, were married on February 22nd.

Dr. B. K. Ozanne, Neenah, to Miss Dorothy Jane Martin at Denver, Colorado, on March 23rd.

DEATHS

Dr. H. A. Sifton, Milwaukee, died on February 27th after a short illness at Phoenix, Arizona, where he had been spending his vacation.

He was born in London, Ontario, in 1867 and graduated from the University of Michigan Medical School in 1886, at the age of nineteen. After six years of practice in Suttons Bay, Michigan, he moved to Milwaukee where he began his career as a surgeon.

During the forty years of his active practice, he had the good fortune to live through the most important years in the development of modern surgery. At the time of his graduation from medical school, the sterilizer first came into use at Massachusetts General Hospital. In the early years of his practice, Lister's teaching of antiseptic surgery had not been generally accepted. Dr. Sifton was among the first surgeons in Wisconsin to operate upon the thyroid gland. He operated upon the stomach and gallbladder with a technic not unlike that used at the present time, before the experiences of other men appeared in medical literature.

Dr. Sifton was a profound student of anatomy and surgical pathology and always maintained a keen interest in surgical progress. He was open-minded and ready to accept new thoughts if they seemed reasonable. His surgical skill and judgment were unsurpassed, and he was eminently endowed with good common sense, being always progressive but never swayed by enthusiasts beyond the realms of reason. His chief characteristics were extreme modesty, indefatigable industry and honesty. He was fearless in his thought and expression and never hesitated to say what he believed to be true regardless of consequences. These characteristics not only qualified him as a great physician but made him an exceedingly valuable asset to Milwaukee Hospital as chief-of-staff for twenty years.

He was a member of the Medical Society of Milwaukee County, the State Medical Society, and the American Medical Association. He was also a member of the American College of Surgeons, the Milwaukee Academy of Medicine, and the Milwaukee Surgical Society, which he founded.

He is survived by his widow. C. W. E.

Dr. D. J. Gardetto, Milwaukee, died in March of injuries received in a fall.

He was born in the year 1896 and was a graduate of Marquette University School of Medicine in 1921. He had practiced in Milwaukee since receiving his license.

SOCIETY RECORDS

New Members

G. L. Baker, Rib Lake.
H. C. Schmallenberg, New London.
Ralph Lamacchia, 2203—52nd St., Kenosha.
Myra Burke, 3128 Lakeland Ave., Madison.
W. M. Sonnenburg, 925 N. 8th St., Sheboygan.
W. H. Studley, 2316 E. Edgewood Ave., Milwaukee.
Herman A. Heise, 3321 N. Maryland Ave., Milwaukee.
J. A. McElligott, 1103 W. Atkinson Ave., Milwaukee.
L. J. Van Hecke, 561 N. 15th St., Milwaukee.
Lloyd F. Kaiser, Rhinelander.
W. A. Sannes, Soldiers Grove.
G. J. Maloof, Wauzeka.
N. A. Bonner, Manitowoc.
N. C. Erdman, 1421—17th St., Two Rivers.
C. R. Gilbertsen, 20 E. Milwaukee St., Janesville.
W. F. Reich, 2236 W. National Ave., Milwaukee.
A. H. Goodsitt, 205 E. Wisconsin Ave., Milwaukee.
S. S. Torcivia, 333 N. Jefferson St., Milwaukee.
L. V. Bergstrom, Amery.
I. L. Waterman, Amery.
J. H. Cummings, 1304 Tower Ave., Superior.

MEDICAL ECONOMICS

PHYSICIANS AND COLLECTIONS

A member of our office staff presented himself for treatment at the office of a member of the State Society where he was unknown recently and returned with this story:

After completion of the treatment the staff member inquired of the physician where he should pay for the services rendered. The physician instructed the patient to pay the office girl. Our staff member stopped at the office girl's desk and announced his intention to pay the bill. He received the following reply:

"Oh never mind that now, we'll send you a statement the first of the month."

The staff member, appreciating, from experience, what cost the mailing of the statement would involve, insisted on paying the bill which amounted to $1.00.

Now, to have entered that small account on the books would have cost not less than 15 cents, the statement at the first of the month would have cost, at the very least, 8 cents. The cost to the patient to mail the check would have been 4 cents. Thus that dollar account would have netted the physician 77 cents, and would have cost the patient $1.04.

In addition to the expense involved in entering the account in the first instance, it is a recognized fact by students of professional accounts, that immediately after the patient steps out of the doctor's door the account depreciates 10 to 15 per cent, and at the expiration of six months the account is worth only 50 per cent of the original charge.

At least the doctor, or his assistant, should not throw obstacles in the way of the patient who wants to pay his bill. As a matter of fact, every opportunity should be made to give him a chance to pay the bill at the time the service is rendered.

THE RELIEF TAX

At the risk of being unpopular, we remind our readers that the Wisconsin Legislature has enacted an Emergency Relief Tax. This tax, as we advised in January, will be assesesd on the basis of the regular income tax return. Statements of the amount of the tax payable will be mailed taxpayers shortly after May 1. It is payable May 15 if the taxpayer wishes to claim the 2 per cent cash reduction. If this deduction is not claimed, the last date for his payment will be July 1.

The emergency relief tax rates on *net income* follow:

1st	$1,000	1 %	$10.00
2nd	1,000	1¼%	12.50
3rd	1,000	1½%	15.00
4th	1,000	2 %	20.00
5th	$1,000	2½%	$25.00
6th	1,000	3 %	30.00
7th	1,000	3½%	35.00
8th	1,000	4 %	40.00
9th	1,000	4½%	45.00
10th	1,000	5 %	50.00
11th	1,000	5½%	55.00
12th	1,000	6 %	60.00

All in excess of 12,000—7%.

Losses upon sale of capital assets can not be deducted in excess of gains during the same period. Deductions from actual tax for single person is $16.25; family exemption—$33.75.

COST OF OVERHEAD

In discussing economic phases of the delivery of medical services, Dr. C R. Bardeen, Dean of the Medical School of Wisconsin, speaking before a student assembly in March, declared that the many schemes he had seen merely added to the overhead. In this connection it is interesting to note that proponents of voluntary hospital insurance admit that this form of insurance, run on a cost basis with a minimum of solicitation charges, had cost the hospitals from 22 per cent to 24 per cent of their income for sales cost.

At the Philadelphia meeting of the American Hospital Association in September, 1934, a round-table on "group hospitalization" was held. Chairman Jolly, President-elect of the A.H.A., asked the question, "Of the money received, what per cent ought to be paid out for the agency?" This question was answered by Mr. C. Rufus Rorem of the Rosenwald Foundation who has been loaned to the American Medical Association to promote the prepayment hospital insurance plan. Mr. Rorem stated, "The experience ranged widely. It ought to be as little as possible. We found rates from as low as 8 per cent to as high as 40 per cent of the gross."

Chairman Jolly: "What would you say would be an average?"

Mr. Rorem: "Others can check me if they wish. I would say the average reported among those yesterday was about 22 per cent to 24 per cent."

MALPRACTICE AND THE DEPRESSION

All companies selling malpractice insurance report a material increase in the number of cases during the depression years. Members who take advantage of the medical defense protection of the State Society are urged to make certain that their dues and medical defense have been paid for the current year. Defense not paid by March 31 lapses until payment is received and defense, even then, cannot be granted for the lapsed period. Keep your dues and medical defense paid right to the date.

And in this connection we are reminded of the member who approached the speaker one evening after a discussion on malpractice and who stated with considerable satisfaction in his voice that he had practiced for 27 years without even a "whiff of a threatened suit". And three days later he was sued.

INSURANCE DIRECTORIES AGAIN

Last month in this column we expressed grave doubts about the value of listing in so-called "insurance directories". We concluded our paragraph by saying that reputable insurance companies had their own methods of ascertaining the ability of physicians and never referred to these so-called "directories".

Now in our mail comes a letter from a claims manager of one of the largest insurance companies in this state.

> "I am sending you under separate cover an insurance medical directory which came to my desk this morning. It was sent us free so I assume that the doctors whose names appear must have paid for the privilege of having their names inserted.
>
> "With this publication came a post card asking us to express our opinion as to the value of this book. I sent the card back and wrote on it 'I think it is lousy'.
>
> "I wonder whether you know of this racketeering. It rather seems to me that this is a form of advertising which on the face of it should be contrary to the ethics of organized medicine in this state. I would appreciate your sending this book back to me after you have read it."

Need we say more?

CORPORATE PRACTICE

That corporations may not practice the healing arts in Wisconsin was re-affirmed in an opinion of the Attorney General on March 6, addressed to the Secretary of the State Board of Medical Examiners. Referring in this opinion to the practice of chiropody the Attorney General held that corporate practice was not permitted.

"The fundamental objection," said the Attorney General, "to the corporate arrangement you mention is that the corporation might be guilty of gross misconduct in its business and violate all standards which a licensed chiropodist would be required to respect and stand immune from any regulatory supervision whatsoever. On the other hand, the licensed employees would also be immune from discipline upon the ground that they were mere employees and were not responsible for their employers' misconduct. * * * Such a condition cannot be countenanced on the grounds of public policy."

PRIVILEGED COMMUNICATIONS

Physicians who render professional service to indigent under the Emergency Relief Administration frequently ask whether they will be liable in event that they disclose a diagnosis in rendering their financial statements to the County Relief Administration. Legal counsel for the State Medical Society has studied this question carefully and holds that, when a physician limits his disclosure to such information as is necessary for him to provide in order to secure payment for his services, he is fully protected. In other words, the relief client who secures professional service under the Relief Administration has waived in advance the giving by his physician of such information as is required of a physician in order to secure payment for his services.

It is to be noted, however, that such records of the Relief Administration are confidential records and any relief or social worker who disclosed any such information would undoubtedly be liable for such disclosure.

THE RACINE REPORT

Many County Societies have committees on Medical Economics. We have just been privileged to see the report of such a committee of the Racine County Medical Society, compiled by Dr. John Docter, Chairman, Dr. R. M. Kurten, Dr. H. B. Keland, and Dr. C. O. Schaefer. We feel that this report indicates such careful and thoughtful study by the committee, and its recommendations are so evidently framed with the intent of promoting the public welfare that we feel justified in reproducing it in full on this page.

"*To the Racine County Medical Society:*

"The Committee on Medical Economics takes pleasure in making the following report in which it has endeavored to deal constructively with the economic condition of the medical profession of Racine County in its relation to public health.

"The care of the public in matters of health, disease and injury is, and should continue to be, under the direction of the medical profession. The most important unit of this relationship is the association of the private physician and individual patient. Your committee believes that the integrity of this unit should be the basis and principle of all organized medicine. Therefore, in order to safeguard the community health it is necessary to protect the rights and interests of the private physician as well as the public individual, whom he serves.

"Since hospitals, health centers, government bureaus and the like are merely accessory to the private physician, it follows that any form of competition set up by such organized groups against the private physician is contrary to the public interests. Furthermore, any extra-professional plan which has for its aim the economic control of the medical profession is a direct attempt to limit the patient's selection of his physician and is incompatible with the best interests of the community at large. Your Committee believes that if and when organization of the profession is necessary, such organization should be instituted by the rank and file of private physicians since eighty to ninety per cent of medical service is handled by this group.

"We have worked diligently and honestly for the last year to arrive at conclusions which we think are

fair and for the best interests of the profession and the public at large. There may be a difference of opinion in the method of accomplishing our goal, but there should be absolutely no difference in the essential principle that the medical profession of our locality should be entrusted with the prevention, and cure of disease and should be remunerated for it. That has been our training and must be our livelihood.

"With these aims in mind we respectfully submit the following proposals.

"Hospital and Dispensory Abuses

"At the present time the committee finds conditions commendable and find no reason for suggesting changes. We recommend a standing committee to hear complaints of any irregularities in the event they do occur.

"Contract Practice

"We the executive committee present the report submitted by the sub-committee as hereto attached:

RECOMMENDATIONS

"In view of incomplete reports to questionnaires, this committee recommend that all present contracts, whether written, oral or implied, in Racine County, remain in force with their present holders.

"Before any member of the Racine County Medical Society in the future engages in any form of contract practice, we recommend that the contract be carefully studied by a committee on contract practice consisting of five members, appointed by the President of the Racine County Medical Society, annually, and their recommendation as to approval or revision, guided by the Code of Ethics of the American Medical Association, be the basis for acceptance or non-acceptance of the contract. Any member not complying with the recommendations of the Committee on Contract Practice shall be declared by the Committee guilty of unethical practice and his case referred to the Racine County Medical Society with the recommendation that he be cited for removal from membership in the Racine County Medical Society.

"We further recommend the following:

"WHEREAS, There is ample evidence to show that Contract Practice serves to stimulate reactions which threaten the harmony and dignity of our profession:

a. Through ruinous competition

b. Inadequate medical service, the result of insufficient provision of funds

c. The control by laymen and the introduction of commercial methods

d. The direct or indirect solicitation of patients.

e. The restriction of a free choice of physicians thereby interfering with the legitimate competition between physicians on a basis other than medical competency

"Therefore, be it resolved, That Contract Practice in every instance where it involves the aforementioned practices is contrary to the code of ethics of the A. M. A. and inimical to the best interests of the public and medical profession, and

"Further be it resolved, That while objection per se to Contract Practice does not exist, nevertheless the prevalence of unethical practices urgently demands that all members of this Society who are now engaged in any type of Contract Practice or who are contemplating so engaging should carefully investigate conditions and details of such service and be guided in their professional conduct by the code of ethics of the A. M. A.

"Industrial Compensation Practice

"The sub-committee submitted a very comprehensive report in which a splendid code to further cooperation between carriers and physicians was contained. The executive committee feels that the economies involved in this problem should be more specific.

"The practice of soliciting work through nurses or minor executives in industrial establishments is inimical with good medical practice as laid down by the A. M. A. That accepting fees below the minimum fee adopted by our society is equally a breach of ethics.

"We further believe that rendering the best possible medical care to industrial cases is implied in the physician-patient relationship involved in all practice of medicine.

"This includes:

a. Calling, consultation.

b. Prompt submission of comprehensive reports.

c. Keeping abreast of developments with industrial medicine.

"The previous action of the society favoring an open panel of appointing members of the society with agents of the carriers on an arbitration board, meets the suggestions submitted by the sub-committee and offers the necessary protection for the members of our society.

"Department of Public Health

"The recommendation submitted by the sub-committee is a comprehensive one and the matter contained therein suggests that the Health Department continue its educational program in preventive medicine but the actual practice of preventive medicine be relegated to the practicing physicians.

"We suggest that the Racine County Medical Society set up a definite fee schedule which is consistent with the financial ability of the public to avail themselves of this service so that the development of preventive medicine will be encouraged.

"The City of Racine should compensate the physician rendering such service to indigents on a basis commensurate with the funds available for such work.

"We feel that the T. B. clinic and G. U. clinic should be manned by members of the society who are interested in these fields of medicine on a per diem basis.

"We recommend that the Health Department take over and operate the Child Welfare Stations and that they be conducted according to the above mentioned plan.

"Free Information to Insurance Companies

"For all original examinations by a Company Examiner, a fee should be paid by the interested company.

"For all additional information which may be required by the insuring company from physicians who have attended the applicant in the past, a fee should be paid by the insuring company.

"For the removal of extra ratings or other additional premiums imposed upon applicants for insurance because of existing impairments, medical history, etc., which evidence of health is required by the insuring companies, a fee should be paid by the insured.

"For reinstatement of a lapsed policy, when medical evidence of insurability is required by the company, a fee should be paid to the physician by the insured desiring reinstatement of the policy.

"*Claims for disability and sick benefits:* In case of claim for disability benefits from life insurance and health and accident insurance companies, a fee should be paid to the physician completing the proof of disability forms by the claimant, since it is incumbent upon him to supply proof of disability according to the terms of the various clauses in force.

"Forms to be completed by the physician or physicians who have been in attendance on the case should be restricted to that pertaining to the particular illness or cause of disability. Particularly in health and accident insurance, information should not be given to an "inspector" without authorization from the claimant, and a fee should be required by the physician, paid by the insurance company.

"Completion of Hospital Records

All records in the hospital should be under the control of the attending physician, and all reports should be issued by him.

"Death Claims

"Proofs of death should be provided by the beneficiaries and fees for their completion should be paid to the physician by the beneficiaries.

"When information is requested in further substantiation of the claim of other physicians, who have in the past attended the deceased, a fee should be paid to the physician by the insurance company.

"Privileged Communications

"A physician should not give information regarding his treatment of a patient without the authorization of the patient.

"The Committee on prescribing and dispensing, submitted the following report which the executive committee feels is not sufficiently representative of the abuses in this department.

"We would like further suggestions for a definite code which may be presented at a joint meeting of the physicians and druggists.

1. Advocate use of U. S. P. and National formulary drugs and prescriptions and not nationally advertised products.

2. Discourage giving samples by physicians without removal of labels.

3. Advocate writing of a prescription instead of verbal prescription to a patient.

4. Discourage counter dispensing by druggist.

5. Discourage spurious advertising and quackery by druggist.

6. Discourage national advertising by pharmaceutical houses over radio and in newspapers.

7. Report all violations to grievance committee.

8. Recommend an open meeting between druggists and physicians to discuss problems to get closer cooperation and harmony between druggists and physicians.

"Committee on Legislation

"To date there has been no material involving this field but we feel that the committee should continue to function and be alert to any unfavorable or favorable legislation so that the weight of opinion of our society can be used to encourage or discourage its passage.

"Committee on Lay Cooperation

"This committee should be continued and the Society through its members should enter more actively into the dissemination of true medical facts and knowledge thereby encouraging the public to depend on the Medical Society for information along medical lines.

"The members should be alert to the vagaries in the practice of the healing art, and to report such offenders and aid in their prosecution."

CORRESPONDENCE

MAY DAY PROGRAM

American Medical Association
Bureau of Health and Public Instruction
Chicago, March 21, 1935.

Mr. J. G. Crownhart, Secy.,
State Medical Society of Wisconsin,
119 E. Washington Avenue,
Madison, Wis.

Dear Mr. Crownhart: Attached is a statement which will probably be of interest to you and to the members of your society.

The statement itself is self-explanatory. It is being sent you through this Bureau because the American Child Health Association requested the cooperation of the American Medical Association in bringing this matter to the attention of practicing physicians through whom, as a careful reading of the statement will indicate, it is desired to work. The cooperation of this Bureau in bringing the matter to your attention has been authorized. (The Journal A.M.A., *104*:11, March 16, 1935, p. 927)

Of course, the American Medical Association through The Journal and Hygeia and the state medical societies through their journals, as well as county medical societies through their bulletins, have always favored diphtheria immunization. It should be gratifying to note that the American Child Health

Association and the Conference of State and Provincial Health Authorities of North America in planning a May Day—Child Health Project for 1935 have chosen to work through the medical profession, enlisting also, of course, the aid of state boards of health and other health authorities.

There is nothing in the plan to indicate what the financial arrangements are to be, but presumably this would have to be a local problem and will have to be settled locally. It is hoped that your society will give this proposal, about which you will also receive a notification from your state health department, official consideration and that means will be found so that the physician may cooperate in this desirable health movement for the mutual advantage of the child, the community and the medical profession.

Very truly yours,
W. W. Bauer, M.D.

WWB:SM-596
Enclosure

IMMUNIZE NOW—STAMP OUT DIPHTHERIA

May Day—Child Health Day has become an established institution throughout the United States. It was inaugurated in 1924 by the American Child Health Association for the purpose of calling the attention of parents, communities, and the public in general to the need for measures to protect the health of children.

In 1928 the United States Congress passed a joint resolution designating May first as Child Health Day, and authorizing the President to issue a proclamation requesting national observance of the day. In 1929 the Conference of State and Provincial Health Authorities of North America appointed a May Day Committee. In 1932 this Committee took over from the American Child Health Association, with the continuing assistance of that Association, the responsibility for the annual observance of Child Health Day. In the states the work is under the direction of State Departments of Health.

Child Health Day celebrations are intended only to mark and emphasize either the inauguration or the culmination of year-round work for improvement of the health of children. The project for 1935 is diphtheria immunization. This was chosen because there has been but little reduction since 1930 in the number of deaths from diphtheria throughout the country. While particular emphasis will be laid on immunization this year, it is not intended that the project be limited to 1935. On the contrary one of the chief objectives is to have the work continued year after year by the medical profession.

Immunize Now—Stamp Out Diphtheria, is the slogan.

The measures proposed are:

To immunize all children between the ages of six months and six years.

To make early immunization a routine practice by all physicians.

The majority of pediatricians do immunize the babies under their care during the first year of life. Physicians in general practice also should follow this procedure.

State Departments of Health and the unofficial organizations interested in children are calling the attention of parents and communities to the need for early diphtheria immunization. Each individual physician should be prepared to take care of the applications for immunization. Cooperative plans for this work should be made by the local medical societies and departments of health in all communities. When a local medical society has perfected plans for this phase of preventive medicine, there is no reason why it would not be possible to assume gradually other types until eventually preventive medicine forms an important part of the practice of all physicians.

This project offers opportunity for many medical societies and many physicians to assume their rightful leadership in the preventive medical work of their communities.

Descriptions of the plans of certain medical societies for community child health work will be found in:

The Experiments of the Medical Society of New Jersey in Furnishing Community Health Service. Section on "The Public Health Hour". p. 162. LeRoy A. Wilkes, M.D., Executive Secretary, Medical Society of New Jersey. American Medical Association Bulletin, December 1934.

The Children's Hour. Nassau Medical News, December 1934. Reprinted in Westchester's Health, February 11, 1935. Published by the Westchester County Department of Health, White Plains, New York.

What the Detroit Plan Offers. Henry F. Vaughan, Dr. P. H., Health Commissioner, Detroit. Reprinted from the December 1933 issue of Medical Economics.

OFFICIAL CALL

The eighty-sixth annual session of the American Medical Association will be held in Atlantic City, New Jersey, from Monday, June the tenth, to Friday, June the fourteenth, nineteen hundred and thirty-five.

The House of Delegates will convene on Monday, June the tenth.

The Scientific Assembly of the Association will open with the General Meetings held on Tuesday, June the eleventh, at 8:30 P. M.

The various sections of the Scientific Assembly will meet Wednesday, June the twelfth, at 9 A. M. and at 2 P. M. and subsequently according to their respective programs.

Attest:

Olin West,
Secretary.

Walter L. Bierring,
President,

Frederick C. Warnshuis,
Speaker, House of Delegates.

Cancer Film Strips, Manuscripts, and Projectors Available from State Society

WITH the purchase of three film strip projectors, film strips and the securing of prepared manuscripts on the control and prevention of cancer, the Cancer Committee of the State Medical Society of Wisconsin is now in position to furnish material for illustrated lectures to any physician who wishes to address lay audiences.

The announcement of the Cancer Committee's plans were made to officers of the county medical societies the middle of March. The Committee's statement follows:

"The public is interested in what we mean when we say control and prevention of cancer. There is a very widespread fear of cancer, and, rightly so, because it is considered an incurable disease. This fear is the greatest single cause for delayed diagnosis. People stay away from physicians because they are afraid that the doctor may find that their disease is cancer. Before the profession can accomplish anything in its campaign against cancer it must dispel this fear and encourage people to consult physicians as soon as the first signs appear.

"The State Medical Society has secured three film strip projectors, film strips and prepared manuscripts on the control and prevention of cancer. These illustrated lectures are available to members of county societies who have an opportunity to address public audiences. One successful way to get this opportunity is to have the local auxiliary arrange for a public meeting and invite one of the local physicians to give the talk.

"The film strip projector is a very convenient, compact little instrument which can be carried in a brief case. Two of our projectors are satisfactory for audiences up to one hundred while one of them can be used for any size audience.

"The film strips are nothing more than lantern slides made on strips of film. The film is fed through the projector by turning a hand screw. Each turn of the screw throws on the screen another picture.

"We have secured through the American Society for the Control of Cancer two strips which treat the subject in different ways. One of these strips is entitled "The Life History of Cancer" (35 pictures); the other "Fight Cancer With Knowledge" (49 pictures). We have three copies of each and a manuscript for each copy. It is possible, therefore, for us to keep three projectors busy throughout the year.

"When arrangements have been made for the talk, write for one of the illustrated lectures on the control of cancer. Address your letter to The State Medical Society, 119 East Washington Avenue, Madison, Wisconsin. Do not neglect to set the date on which you must have the outfit and state what size audience you expect. It is advisable to notify the Society of the date you desire the projector as far ahead of time as possible to insure your reservation. The projector will be sent two days early so as to provide time to review the film and lecture. Do not fail to return projector, film strip and manuscript promptly. Any delay on your part may cause disappointment and failure to others who are counting on this material for the success of their meetings."

Chiropractors Seek Compensation Act Rights, Basic Science Exemptions and Use of Title "Doctor"

THREE bills designed to broaden the licensing rights of chiropractors have been introduced in the Wisconsin Legislature, presumably at the request of the Wisconsin Chiropractic Association. In former sessions a single bill containing all of the provisions embodied in the four bills for the 1935 session has been defeated. This year the program has been divided into four separate bills which are:

COMPENSATION ACT BILL

Bill 403, A (Assembly) introduced by Mr. Grobschmidt, Milwaukee. This bill provides that, unless employers file specific objection thereto, injured employees whose injuries fall under the Workmen's Compensation Act may elect chiropractic treatment in lieu of medical treatment, provided that the election of chiropractic treatment "shall not relieve the employee from the requirement to submit to and follow competent and reasonable surgical treatment as may be required."

The bill had its Assembly public hearing before the Committee on Public Welfare on Tuesday, March 19th. At this time passage of the measure was advocated by Assembly-

man Grobschmidt, Milwaukee, who introduced the bill. Others who appeared for the bill were Mr. H. J. Lowry, Madison, counsel for the Wisconsin Chiropractic Association; E. M. Cardell, Kenosha, Chairman of the Wisconsin Board of Chiropractic Examiners; R. A. Nelson, Barron, President of the Wisconsin Chiropractic Association and E. W. Klemma, Kenosha, chiropractor.

EMPLOYEES' RIGHTS ENDANGERED

The bill was opposed by Mr. George Crownhart, Secretary of the State Medical Society, whose memorandum on the bill follows:

"I appear today, not as a representative of medicine at a dispute between medicine and chiropractors, but to give your Committee some information that we feel may be of value to you in determining for yourselves whether or not this bill is designed to promote the public welfare.

"About fifteen years ago, the Wisconsin Legislature opened this state to the admission of chiropractors without any examination and with the only restriction that they post in their offices a sign with the words, 'Not Registered or Licensed in Wisconsin.'

"In June, 1925, Governor Blaine signed the Wisconsin Basic Science Law and simultaneously a bill to establish a State Board of Examiners in Chiropractic. As is usual under this type of legislation a 'grandfather clause' was included to the effect that all chiropractors then in the state would be granted a certificate by the Basic Science Board and a license by the Chiropractic Board on the basis of their previous practice and without requiring them to take the examination. Over six hundred chiropractors were thus licensed in Wisconsin on the basis of their previous practice and without having had at any time any examination before any Board whatsoever. This group of practitioners apparently constitutes about 98% of those in practice in the state today.

"For the further information of your Committee, the Wisconsin Chiropractic Association within the past five years in a large advertisement defined chiropractic as 'a philosophy, science and art of things natural; a system of adjusting the articulations of the spinal column, by hand only, for the correction of the cause of disease.' The Association declared that 'this definition is inclusive and any and all other methods are declared not to be chiropractic.'

"Chiropractors licensed in Wisconsin today to practice chiropractic are not permitted under the Wisconsin laws to administer drugs, to do surgery, to sign death certificates or other health certificates and most important in connection with this bill, is this matter of inability to sign death certificates.

"The bill that is before you today, with the exception of the Christian Science provision, is identical with a bill which was introduced in the legislature by Mr. Grobschmidt four years ago with the exception of the provision that appears on the back of the bill. This bill of Mr. Grobschmidt's of four years ago was vetoed by the Governor, by Governor La Follette, who said in his veto:

"'This Bill does not involve the right of an individual to select such treatment as he may believe curative. Within a very wide range, every individual is allowed a wide latitude in selecting and providing for the care of his bodily ills, as he may determine. This Bill involves the question as to whether or not the State is to approve this particular form of treatment under the terms of the Workmen's Compensation Act and to place it upon a footing of equality with that of general medical services.

"'If this Bill were enacted, there is a possibility that employees might be misled and prejudice their rights under the Workmen's Compensation Act, since section 102.09 subsection (1) paragraph (c) provides that 'no compensation shall be payable for the death or disability of an employee, if his death be caused by or insofar as his disability may be aggravated, caused or continued by an unreasonable refusal or neglect to submit to or follow any competent and reasonable surgical treatment.' In any case where the Commission found that the chiropractic treatment was not a satisfactory substitute for competent and reasonable surgical treatment, an injured employee would have sacrificed his right to compensation for any added disability due to the fact that he had selected chiropractic treatment instead of such surgical treatment. For the reasons stated, I return this Bill without my approval.'

"The paragraph on page two of the bill is apparently designed to overcome one of the oppositions of the Governor in that it provides on line 16, 17, 18, 19 and 20 that if an employee does elect to accept chiropractic treatment, such election shall not relieve the employee from the requirement to submit to and follow competent surgical treatment if any be required.

"Now this matter of treatment under the Compensation Act is one of grave significance for the injured employee for if he does not follow the exact course as outlined by the law he sacrifices not only his right to have his injury cared for at the expense of the employer but most important he sacrifices in part or in whole his right to any compensation whatsoever. I repeat that this is of grave significance to the injured man.

"How is the injured employee going to know, under the terms of this bill, when he should submit to surgical treatment and when he should not. The bill before you does not say that the employee must submit to surgical treatment when he is told to do so by the employer and as result of this significant omission we may only assume that the injured employee himself has the sole responsibility for de-

termining that his injury is not one that competent and reasonable surgical treatment would benefit.

"And on the basis of this fact I think we may reasonably assume in light of all the present contested cases before the Industrial Commission that in practically every case where an injured employee sought chiropractic treatment the insurance carrier would set up a defense against paying compensation on the grounds that the employee should have submitted to competent and reasonable surgical treatment for his injury indicated the need for such treatment and by reason of his failure to do so, the insurance company would disclaim any liability whatsoever. Here then is something that would involve perhaps hundreds of injured employees in immediate litigation and on the basis of any reasonable interpretation of the bill, would deprive the largest proportion of any benefit under the Workmen's Compensation Act.

"I have an interest in the Workmen's Compensation Act that transcends any interest that I may have as Secretary of the State Medical Society of Wisconsin. It so happens that my father was the first chairman of the Wisconsin Industrial Commission and served on that body during its formative years when its policies were established designed to protect and promote the interests of the laboring men of this state who were injured in the course of their employment. I have submitted this bill to four leading attorneys of this state for their independent opinions. All of them were of the opinion that the duty devolved upon the injured employee to determine when or why he should not have reasonable and competent surgical treatment. Certainly it would require a Supreme Court to determine as to the responsibilities of the injured man.

"Speaking as one interested over a long period of years and in a very close and personal way with the proper and beneficent administration of this Act, it seems to me that the last thing that the legislature would want to do would be to enact a bill which would throw into almost immediate litigation the rights of the injured man that the law was created to protect.

"Dropping this point, I would discuss with you briefly the fact that if an injured employee went to a chiropractor and death occurred while under the treatment of such man, just who is going to determine the cause of his death? The chiropractor cannot sign the death certificate and so the coroner would have to hold an inquest. Yet from that death certificate might depend every future advantage of the wife and dependent children of that deceased laboring man. I say again that this is of too grave significance to be passed by lightly and certainly if you were to pass this bill you should pass with it a bill to give chiropractors the right to sign death certificates regardless of whether they ever took an examination before any board or not so that you would not throw into immediate jeopardy the rights of the widow and dependents of the workman who innocently followed an enactment of the legislature.

"I call your attention to the fact that chiropractors do not practice in hospitals in this state. They are able, at the best, to give but an office treatment which under their own definition is a manipulation by hand. There is nothing in the present law, as Governor La Follette pointed out four years ago, which prevents anyone from having any treatment that he may believe to be curative and the question that is before you here is not that but whether this legislature desires to place this onerous responsibility upon the injured workman to prove that he made wise selection of treatment when he went to a chiropractor under the terms of this bill.

"Finally, I submit that large numbers of working men carry accident policies of their own or life insurance policies which contain double indemnity benefits in event of accidental death. These benefits would of course be endangered in event that death occurred while under the care of the chiropractor inasmuch as the chiropractor could not sign the death certificate.

"When one studies this measure in connection with the beneficent intent of the Workmen's Compensation Act of this state I, at least, am led to the inevitable conclusion that this measure is designed not to promote the joint interests of the injured workman and the chiropractor but to promote the financial interests of the chiropractors even though it may endanger every right and privilege that it is intended the injured workman may receive under the terms of our Workmen's Compensation Act. It is for these reasons that we feel that it is incumbent upon us to present this information to you that you may have it before you when making your own determination as to whether this bill will or will not promote the public welfare and in this instance the welfare not just of some five or six hundred chiropractors in this state but the welfare of the men who fall under the provisions of the Act that this bill amends,—the welfare of upwards of 600,000 employed persons in Wisconsin."

BASIC SCIENCE EXEMPTIONS

Bill 421, A (Assembly) introduced by Mr. Busby of Milwaukee at the request of the Chiropractic Association would exempt chiropractors from examination of the Basic Science Board with the provision that a like examination in the same four subjects of anatomy, physiology, pathology and diagnosis by new applicants for a chiropractic license by the State Board of Examiners in Chiropractic.

The Wisconsin Basic Science Board for examination was created in the 1925 session of the legislature and the Act has not been amended to this date. It provides that all

who intend to practice any branch of the healing art in Wisconsin, with the exception of dentists and optometrists, shall take examination in the subjects of anatomy, physiology, pathology and diagnosis.

Examinations are conducted by a Board of three University teachers who are not, however, members of the teaching staff of any medical school. The purpose of this examination is an impartial test of all who desire to treat the sick, without respect to their schools of treatment, to insure the public that irrespective of such school all have such basic knowledge as will enable them to use the usual care and skill in ascertaining with what disease the person is afflicted. It is the exemption from an examination from this impartial Board that the chiropractors seek to accomplish under the terms of Bill 421, A.

ASK FOR TITLE "DOCTOR"

Bill 517, A (Assembly) introduced by Mr. Blomquist of Adams, presumably at the request of the Wisconsin Chiropractic Association. Under the present statutes only those licensed to practice medicine and surgery or osteopathy and surgery may use the title "Doctor." Chiropractors have long desired this right and this bill would grant a chiropractor to use the title "Doctor of Chiropractic" or the initials "D. C."

MARSHAL FORCES

It is reported at the Capitol that chiropractors in the state are holding meetings and otherwise marshaling their forces in an effort to secure the passage of this three point program. Both members of the Assembly and Senate report intensive lobbying by the chiropractic representatives.

Senate Kills, Assembly Advances, Bills for Study of Cost of Medical Care

BY A VOTE of nineteen to ten the Senate on Wednesday, March 27th, killed the Groves bill (137, S) calling for the creation of an interim committee to study the costs of medical care. On the following day the Assembly advanced an identical bill by Assemblyman Sigman of Two Rivers practically without debate and without a roll call. The Assembly bill thus becomes the only remaining bill on this subject now before the legislature. It has been ordered sent to the Joint Committee on Finance which committee will probably hold a public hearing on the measure during the second week in April, after which it will go back to the Assembly for final vote in that body the third or fourth week in April.

Members of the Joint Committee on Finance who are to report their recommendations on the remaining Assembly bill (297, A) are: Senators Brunette, Green Bay, chairman; Griswold, West Salem; Wade, Antigo; Zimny, Milwaukee, and Mack, Shiocton. Assembly members of the Committee are Assemblymen Beggs, Chairman, Rice Lake; Baker, Mount Horeb; Hoesly, New Glarus; Fuhrman, Bowler; Sieb, Racine; Harper, Lancaster; Kelly, Hudson; Sibbald, Grandview, and Nelson of Medford.

SENATE DEBATE

When the Groves bill was reached in the Senate, Wednesday morning, March 27th, it was the second time that it had been discussed on the Senate floor. Senator Kannenberg, Wausau, introduced an amendment to remove the limitation of $3,000 on the expenses of the Committee. The amendment was defeated by a vote of 16 to 13. The question was then on advancing the original bill.

"This bill was discussed and considerable argument made two weeks ago," said Senator Groves. "I very much hope that it is not indefinitely postponed as recommended by the Senate Committee on Education and Public Welfare.

"I think that sooner or later there is going to be some constructive suggestion made for better organization of medical care in the community and that the interim committee might possibly be the instrument for such

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suggestion. At the present time the medical field is very badly organized. We have a bad distribution of the costs of medical care. I think there are a great many people bearing more than they can handle. I think a great many people with low incomes are not getting the medical care required for their health. The result is that they develop defects which harm the resources of the states.

"It was suggested by the Senator from the fourth (Senator Morris of Milwaukee) that the medical profession is putting its own house in order and was making an investigation and that a legislative committee could not add anything. I don't feel that this is true. I think that asking the medical profession to make an investigation is like asking the speculators to investigate the stock exchange. I think an outside point of view is necessary.

"I have no preconceived idea of just what can be recommended to better organize the medical services in Wisconsin, to give the services that are required at the present time, but there is an organized medical cooperative in one community which provides for the medical needs of large numbers of families at a flat cost of about $24 a year. I don't say that it is the solution but I think that here is one field of security upon which some progress should be made in the next ten or fifteen years. A report would be very helpful at this time. I hope that it is not indefinitely postponed."

The movement to kill the bill was led by Senator Oscar Morris of Milwaukee who declared that he had never heard of a physician or surgeon who refused to handle a case because he wasn't sure of getting his money.

"I think the medical profession should handle its own case," said Senator Morris. "A survey is now being made by the State Medical Society of Wisconsin. The physicians' charges are pretty high but only to those who are in position to pay. They discriminate and rightly so. They have the kind of patient who can pay the cost and the kind of patient who doesn't pay anything. I never heard of a physician or surgeon who refused to handle a case because he wasn't sure of getting his money."

Senator Morley G. Kelly of Fond du Lac declared that he had been reliably informed that a federal committee is already studying the same subject and had spent many thousands of dollars in its work. Senator Kelly added that the legislature might well wait for the congressional report.

"At the present time figures indicate pretty closely that the system does not work out as well as it should," said Senator Groves. "I mention a survey in Milwaukee which showed that of five hundred people who were looking for work and who were examined, ninety per cent had work defects which could be corrected. Of thirty dollars spent for medical care, one dollar is spent for protection. In regard to the point raised by the Senator from the 18th (Senator Kelly) in regard to the survey being made in this field. It is true that there are very extended investigations being made on the cost of medical care but I do not believe that any of them have touched on the possibilities of improving the situation with state legislation and for that reason I think the Committee working in this field could accomplish a great deal of worth while results."

Senator Erle G. Ingram of Eau Claire supported the Groves bill on the ground that it would help to correct a system to lower the cost of medical care for the indigent.

"The question of cost of medical care in the relief situation," declared Senator Ingram, "was discussed on one of my visits home, and it was the consensus of opinion that some system should be worked out that would be less expensive than the present system. This is not a question for the medical profession. Whenever a patient gets well the doctor gets credit for it and when the patient dies they don't get the blame. I don't see why the medical profession has objection to a committee studying to find better means of putting into effect the relief proposition.

The roll call by which the Groves bill was killed in the Senate follows:

For killing the bill: Senators Bolens, Brunette, Callan, Carroll, Clancy, Coakley, Dempsey, Griswold, Kannenberg, Kelly, Mack, Morris, Morrissey, Nelson, Phillips, Schoenecker, Shearer, Shenners and Wade—19.

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Laryngoscope, 1935, XLV, 149-154★

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Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245★

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Against killing the Groves bill: Senators Anderson, Cashman, Engebretson, Groves, Hunt, Ingram, Leverich, Panzer, Rush and Severson—10.

Absent or not voting—Senators Galasinski and Zimny—2.

COST OF MEDICAL CARE

When the Groves bill was reached on the Senate calendar Friday, March 22nd, a rather full discussion was had and then the bill was laid over to permit of a vote when all could be present.

"There is something wrong with our system of medical care in this country," declared Senator Groves on the Senate floor. "We are way behind Europe in public health, in scientific advance and in the distribution of the costs of medical care. Many physicians have a wholly inadequate practice and yet hundreds of people in need of treatment are too poor to secure aid.

"Thousands are head over heels in debt due to the excessive costs of medical care. These costs take from one-half to two-thirds of the annual income of some families. I appreciate that some interim committees have been a waste of time but here is a field for constructive work. It will take a lot of study to do anything worth while but the suggestions and reference documents of this committee can be of very real influence in shaping progress in Wisconsin in the future."

"I think this is a worth while bill," added Senator Ingram of Eau Claire. "There is a lot of talk about medical relief in my district and I think the investigation might offer constructive suggestions. I appreciate that the medical fraternity has not been keen about so-called 'socialized medicine' but there is no harm in throwing light on this subject. In the field of medical relief alone the result might save the taxpayers a whole lot of money and secure a better administration of relief. For that reason I am going to vote for the bill."

Senator Oscar Morris, Milwaukee, opposed the bill on the basis that the appropriation was too small to do any adequate work.

"It seems to me," said Senator Morris, "that the appropriation of $3,000 is entirely too small. I understand that the medical men of the state have already made a number of surveys. We cannot get far on this small amount and I think it would be better to wait for the findings of the State Medical Society at a subsequent session.

"I am told that the work that has been done in Wisconsin by the State Medical Society has cost upwards of $15,000,—what can we get for $3,000? I see no particular harm in the measure but it seems to me that the work is already being done in Wisconsin through the medical profession."

Senator Ingram of Eau Claire then declared that there should be an investigation by an impartial source outside of the Medical Society and pointed out that the $3,000 appropriation of the bill could be amplified by funds from the State Emergency Board.

Senator Kannenberg, Wausau, member of the Committee on Education and Public Welfare of the Senate which reported the bill for killing, said that while there was a good deal of merit to the bill the committee did not feel that it could support it in its present form and suggested that it be laid over until a full senate was present on Wednesday, March 27th.

Senator Conrad Shearer, Kenosha, indicated that he did not favor the method of appointing the committee on the senate side and Senator Morris then regained the floor to point out that the scope of the investigation permitted the committee to subpoena the books, papers, and confidential records of any physician and surgeon in the state. It was at this point that Senator Groves adopted Senator Kannenberg's suggestion and the bill was laid over.

SENATE HEARING

The first hearing on the identical Senate and Assembly bills to create the interim committee was held on the Groves Bill before the Senate Committee on Education and Public Welfare, March 7th. At this hearing the sole presentation for the bill was made by Senator Groves in the following statement:

"Members of the Committee: The substance of this bill is apparent from the title and what I will do is to make a short argument in behalf of such a Committee. The cost of medical care in this country is a serious problem and becoming more of a problem right along. This cost has greatly in-

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creased during the last few years. One reason for this is the very great increase in the use of hospitals. Fifty years ago there was one hospital bed for 700 patients; at the present time there is one for every 125. In Europe all hospitals are tax-supported and the personnel in them is paid for by the state but that is not true in the United States. The cost of medical care has increased because the use of specialists whose services have been rather high-priced, have added a great deal to the total burden. It has increased because of the increased knowledge of medical practice which has resulted in the increased cost of physicians. It is a long story but the fact remains that sickness costs are frequently one-third to one-half the middle class income. It is not at all uncommon for it to run as much as one-tenth or one-fifth of a middle class or a lower class income. The total cost of medical care is $30.00 per capita, or 4% of the national income. One-sixth of the families bear one-half of the total expenditure. They get, of course, much more than their share of the total load. The lower classes receive inadequate care at the present time. The death rate is almost one-half again among unskilled workmen as among professional classes. Twenty-eight persons for every 100 who borrow from small loan companies do so because of expenditures arising from sickness or death. This indicates something of the problem which the costs of medical care represent.

There is another side of this medical proposition, —the possibility of more preventive medicine which is very undeveloped. We spend $1.00 out of the $30.00 per capita for prevention, for public health service and a great deal of illness in the community is subject to prevention which is not now being prevented. In Milwaukee a short time ago a study was made of about 462 people at the age of sixteen who obtained work permits, and it was found that 425 or 92% had some physical defect,—56% dental, 19% throat, 13% eye, and 12% unclassified. Proper care up to sixteen years of age could have prevented most of these situations. Of all the ills that human beings are subject to, there is no question that most of them are subject to prevention if we had the situation organized for that purpose. Now I might say a word about what could be accomplished by such a Committee. I don't pretend to be an authority but it does seem to me that we have reached the point where we could do something in the direction of security along this line. We are secure from every other kind of insecurity, but we are not secure from payments of $1000 to $2000 for medical treatment. Perhaps two things can be accomplished. In the first place the Committee might bring in some suggestions in regard to the possibility of cooperative bearing of the medical load.

I have no preconceived ideas. In Europe they have the health insurance idea or cooperative medicine proposition, which as some observed in last week's newspaper, is now practiced at Ogema, Wisconsin,—where the entire cost of medical care even up to operations, as I understand it, is taken care of in the small town by cooperative organization at a cost of $24.00 a year. I don't suggest anything in regard to better budgeting of medical care, but I think it is a field in which there should be some program. President Roosevelt is recommending security for unemployment and old age, which without question came out of Wisconsin. I hope we will be able to make some program in the direction of better distribution of the costs of medical care and some arrangement whereby they could be budgeted so that they can be taken care of more easily.

The other thing it seems to me could be accomplished is more and better attention to the public health. The prevention program could be improved. I will close by reading a couple of paragraphs from the *Survey* on the cost of medical care in 1929 by a National Committee. It is a very interesting report.

I repeat that without any preconceived idea of what such a Committee ought to recommend, I think there is a very fruitful field and about as good a place to put an interim committee at the present time with the hope of making a real program as could be found.

The attitude of the State Medical Society of Wisconsin and the Wisconsin Hospital Association was then presented by Mr. George Crownhart, Secretary of the two societies. He said:

"Representing both of these societies, (State Medical Society of Wisconsin and the Wisconsin Hospital Association) I appear to make a brief statement concerning this measure. We do not appear either to advocate or oppose the bill but to assure you that both organizations are ready and willing to do all in our power to aid such a committee in event that you feel that such an investigation will be socially useful. In making this statment we of course assume that the committee to be appointed would be made up of men and women who would be willing to devote to the study the great amount of time that would of necessity be required and, secondly, that none would serve on such a committee who were already satisfied in their own minds as to what conclusions the committee should reach.

"In order to orient ourselves as to the total costs of medical care, it will interest you to know that in the last prepared summary of the way in which the American people spent their annual income, this grading was found:

9	billion for taxes
7 2/3	billion for food
3 1/2	billion for rent on homes
3 1/2	billion for clothing
2 9/10	billion for amusements and recreation
2 9/10	billion on automobiles
2 1/8	billion on power and light
1 3/4	billion on home furnishings including radios
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"Now a word as to the health picture in Wisconsin:

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"During this same period the average length of hospital stay has been cut from twenty days to ten days. If the incidence of preventable disease that was prevalent in 1910 had continued without decrease, our State Health Officer tells us that we would have to spend $26,000,000 in Wisconsin this year which is already saved due to the advance of medicine.

"Despite this fine record of high accomplishments with its tremendous declines in the costs of illness, the profession has never relaxed its effort both to improve the quality of medical service and means for its distribution to the end that adequate service might be available for all at a price that can be met regardless of financial status of life. During the past seven years the Committee on the Costs of Medical Care has spent over $900,000; the American Medical Association over $100,000; and the State Medical Society of Wisconsin well over $15,000,—all looking towards ways and means of improving the quality and distribution of medical services of all sorts.

"It will be evident to you at once, I am sure, that an investigation with an appropriation of $3,000 can accomplish little unless members of such a committee will give most generously and freely of their time and energy. This is most important, for the results of a hurried or incomplete hearing might well throw in confusion that health advance which is now taking place in our state and which is promised for the future.

"In connection with the subject of voluntary and compulsory sickness insurance, for instance, we are now in position to lay before such a committee factual and essential data and studies which alone would require a minimum of ten hearing days for its presentation.

"Such an investigation, for instance, could not proceed very far without a very complete study of the tremendous financial load that has been assumed by physicians and hospitals throughout the state in the field of caring for both the indigent and unemployed. Mr. Hopkins, federal relief administrator, has declared that the service the physician has given to the unemployed without hope of compensation in any degree is 'a grand story.' Yet a study of how the community and federal government has shifted in major portion the relief and unemployment burden of illness to the hospitals and physicians is basic and fundamental to any study of the costs of medical care.

"You will have a long afternoon of hearings and I close at this point with the statement that if you feel that this investigation would be an impartial study and that its end result will be helpful in promoting the public health,—then I can assure you that both the State Medical Society of Wisconsin and the Wisconsin Hospital Association not only have no reluctance to the investigation but will seek the opportunity to place most fully before the committee the long and costly factual studies that we have already made as the basis for continuous progress in our own state."

ASSEMBLY HEARING

When the Sigman bill (297, A) to create an interim committee to study the costs of medical care was reached before the Assembly Public Welfare Committee on Tuesday, March 19th, Assemblyman Sigman, Two Rivers, made the opening argument for the proponents.

"It is most essential to have such an investigation," said Mr. Sigman after outlining the terms of the bill, "because we all know and agree that the care of the human being is the most important problem in Society and any advance will be advantageous to all people. This care must be rendered at the lowest possible costs if the benefits are to be widespread. At present too many people are without proper care because of the cost.

"Secondly, I believe this information will develop means for economy and I have in mind particularly the situation at Two Rivers where before we had the unemployment situation we had a city physician that we paid $1500 to $1800. Under the F.E.R.A. medical costs have gone up to $500 a month and is growing by leaps and bounds all over. It is the duty of the legislature to investigate this subject matter.

"In Outagamie County I know of one man and child who hitch-hiked all the way to Madison in order to secure treatment for

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trench mouth that had been denied locally. In another case a man had to come to Madison in order to plead his case before the relief agencies to secure a wooden leg."

Senator Groves, Madison, repeated his argument made before the Senate Committee on Education and Public Welfare but added thereto the statement that while the medical profession was investigating this situation "such an investigation could be likened to inviting speculators to investigate the stock exchange."

Miss Josephine Brabant, Madison, representing the Madison and Wisconsin federation of teachers, then appeared in favor of the bill.

"This Committee can do a very valuable piece of work," said Miss Brabant. "The poor are well taken care of but it is the middle class that suffers. I notice it in certain pupils that lack care, and educational opportunities without health opportunities are in truth nullified.

"One hundred years ago if it had been proposed to investigate the subject of free public schools I would have no doubt that it would have been opposed by all the private schools that were in existence. Yet today we have free public schools everywhere. So in this investigation do I see the opportunity for a constructive piece of work which will benefit the middle class people, such as the teachers who are without funds to purchase needed medical care."

The argument for the teachers was continued by Mr. Arno Zander, legislative representative of the Wisconsin Federation of Teachers.

"Teachers particularly are suffering from lack of medical care," said Mr. Zander. "They either have to do without it or else suffer from the costs of medical care."

"No original studies are needed but we do need to assemble the existing material that is already available and make the conclusions available to the legislature. There is a crying need for this analysis and more for the middle classes than for the lower and upper classes. Teachers suffer keenly and the Wisconsin Legislature should go on record in this small way in hopes that something can be done."

In response to questions by the Committee members, Mr. Sigman, proponent of the bill, stated that he appreciated that the appropriation was low and added that he had no reluctance to an amendment which would permit the Governor to allocate further funds for the work of the committee in the discretion of the Governor.

The position of the State Medical Society of Wisconsin and the Wisconsin Hospital Association was presented before the Assembly Committee, as in the Senate hearing, by Mr. Crownhart, Secretary of the two societies.

The Journal Book Shelf

BOOKS RECEIVED FOR REVIEW

Mouth Infection. By Oliver T. Osborne, M. D., professor of therapeutics, emeritus, and formerly clinical professor of medicine, Yale University. Price $2.00. Published by the author, Dr. Oliver T. Osborne, 1155 Forest Road, New Haven, Conn.

Martini's Principles and Practice of Physical Diagnosis. Edited by Robert F. Loeb, M. D., associate professor of medicine, College of Physicians and Surgeons, Columbia University, and Presbyterian Hospital, New York City. J. B. Lippincott Co., Philadelphia, Pa. Price $2.00.

The Nervous Patient. By Charles Phillips Emerson, M. D., research professor of medicine, Indiana University, Indianapolis. Price $4.00. J. B. Lippincott Co., Philadelphia, Pa.

Memoirs of a Small-Town Surgeon. By John Brooks Wheeler, A. B., M. D., emeritus professor of surgery, University of Vermont, College of Medicine. Price $3.00. F. A. Stokes Company, New York, N. Y.

The Romance of Exploration and Emergency First Aid From Stanley to Byrd. Chicago Century of Progress Exposition 1934. Burroughs Wellcome & Co., 9–11 East 41st St., New York, N. Y.

Heart Disease. By Harold E. B. Pardee, M.D., assistant professor of clinical medicine, Cornell University Medical School; associate attending physician, New York Hospital. Second edition. Lea & Febiger, Philadelphia.

Female Sex Perversion. By Maurice Chideckel, M.D. Eugenics Publishing Company, New York, N. Y.

PHYSICIANS' EXCHANGE

Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

WANTED—Copies of March, 1935, issue of Wisconsin Medical Journal. Will pay fifty cents for each copy. Forward to Wisconsin Medical Journal, 119 E. Wash. Ave., Madison, Wis.

FOR SALE OR RENT—Practice located twenty miles north of Milwaukee on highway 57. Will also sell instruments, x-ray and light ray machines and medicines. Reason for selling, retiring. Terms very reasonable. Address No. 958 in care of the Journal.

POSITION WANTED—Married man with 17 years' expereince as public accountant, banking, general business and organization work, desires position as business manager of hospital and clinic in western or northwestern Wisconsin in a city of 2,500 or over. References furnished.
E. W. Melster, White Bear Lake, Minn.

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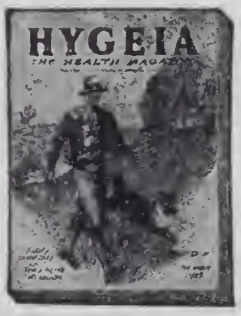

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All correspondence should be addressed to Kenilworth Sanitarium, Kenilworth, Ill.

Methods of Treatment. By Logan Clendening, M.D., clinical professor of medicine, medical department of the University of Kansas. Fifth edition. Price $10.00. C. V. Mosby Co., St. Louis, Mo.

Diseases of the Skin. By Richard L. Sutton, M.D., professor of dermatology, University of Kansas, and Richard L. Sutton, Jr., M.D., assistant in dermatology, University of Kansas. Ninth edition. Price $12.50. C. V. Mosby Co., St. Louis, Mo.

Physical Diagnosis. By Warren P. Elmer, M.D., associate professor of clinical medicine, Washington University School of Medicine and W. D. Rose, M.D., late associate professor of medicine, University of Arkansas. Price $8.00. C. V. Mosby Co., St. Louis, Mo.

Physiology in Modern Medicine. By J. J. R. Macleod, M.D., Regius Professor of Physiology in the University of Aberdeen, Scotland. Seventh Edition. Price $8.50. C. V. Mosby Co., St. Louis, Mo.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

The Autonomic Diseases or the Rheumatic Syndrome. By T. M. Rivers, M. D. Price $3.00. Dorrance & Co., Inc., Philadelphia, Pa.

This book is very interesting. It shows how the art of medicine makes use of the science of medicine and is presented much in the style of the ancients. It illustrates the efforts of an individual in a small community without the benefit of great laboratories, large numbers of patients, or organized libraries and shows how clinical material, even small, carefully studied with limited means, is of great value.

One may not agree with all the facts, nor all the conclusions drawn, yet it is stimulating and interesting. E. R. S.

MOLD ALLERGY

(Continued from page 257)

dust: the fungus allergen and an unknown allergen.

SUMMARY

1. Sensitization to fungi plays an important rôle, direct or complicating, in the causation of asthma, hyperesthetic rhinitis and hay fever.
2. In a series of 243 patients with respiratory allergy 68, or 28 per cent, gave positive cutaneous tests to one or more of the fungus extracts enumerated.
3. The majority of these fungi were the ordinary molds whose air-borne spores form a ready opportunity to cause inhalant allergy.
4. In a total of 590 patients, consisting chiefly of various forms of respiratory allergy in whom tests with yeasts were made, 65 or 11 per cent reacted to the latter.
5. Fungus-sensitive patients are usually sensitive to house dust but patients sensitive to the latter may or may not be sensitive to fungi.

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ECZEMATOID DERMATITIS
By O. H. and H. R. Foerster, M. D.
NEUROLOGICAL SURGERY
By Loyal Davis, M. D.
SYMPOSIUM ON NEURALGIAS
By A. I. Rosenberger, M. D.
A. W. Bryan, M. D.
MANAGEMENT OF ABORTION
By R. S. Cron, M. D.
A. H. Lahmann, M. D.

TABLE OF CONTENTS PAGE 296

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TABLE OF CONTENTS

ORIGINAL ARTICLES

Page

Infectious Eczematoid Dermatitis by O. H. and H. R. Foerster, M. D., Milwaukee ---- 305
Neurological Surgery by Loyal Davis, M. D., Chicago ---- 309
Neuralgia of the Trunk and Extremities by A. I. Rosenberger, M. D., Milwaukee ---- 318
Neuralgias of the Head and Neck by Albert W. Bryan, M. D., Madison ---- 320
The Management of Abortion by R. S. Cron, M. D., and A. H. Lahmann, M. D., Milwaukee 327

EDITORIAL

The Problem of Tonsillectomy ---- 332

MISCELLANEOUS

Society Proceedings ---- 334
The Woman's Auxiliary ---- 336
News Items and Personals ---- 338
Births, Marriages, Deaths ---- 340
Society Records ---- 340
Medical Economics Page ---- 341
Debate "Socialized Medicine" in Wisconsin High Schools Next Fall ---- 343
Section on Radiology Meets at Milwaukee May 17, 18 ---- 343
Chiropractors Win Assembly Battle to Extend Privileges; Senate to Decide ---- 344
Convalescent Serum Center Established at Columbia Hospital, Milwaukee; to Serve State ---- 347
Naturopaths Seek License in Wisconsin; Assembly Bill Proposes Exemption for Present Practitioners ---- 347
Chiropractors Seek to "Short-Circuit" Basic Science Act ---- 348
State Society Bill to Create Medical Grievance Committee Advanced ---- 350
American Medical Golfers ---- 350
Books Received for Review ---- 352
Book Reviews ---- 352
Physicians' Exchange Advertisements ---- 362

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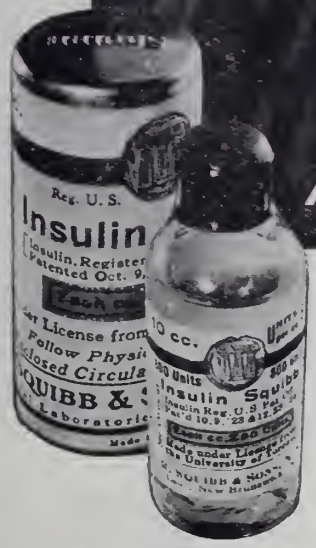

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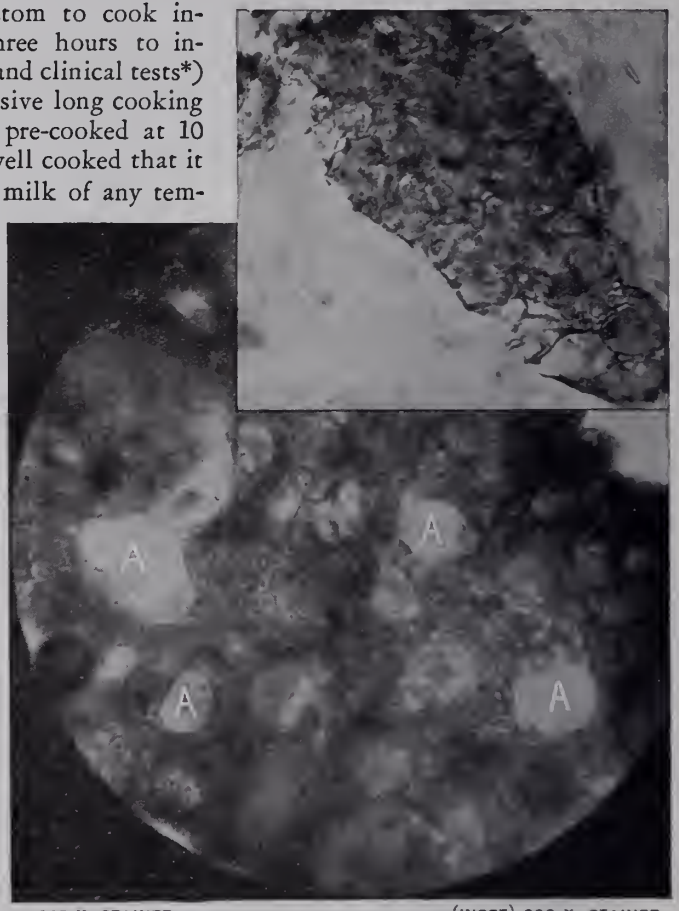

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Large photomicrograph: Pablum mixed with cold water—portion of large flake. Pablum flakes are honeycombed with "pores" or air-spaces (note light areas A). This porosity permits ready absorption of digestive fluids by the entire flake. No starch granules are visible—they have been completely ruptured.

Inset: Farina cooked ½ hour—clump of cereal composed of unruptured starch granules. Note density of clump and lack of porosity. Many starch granules, such as are present in raw cereal, remain unchanged in form.

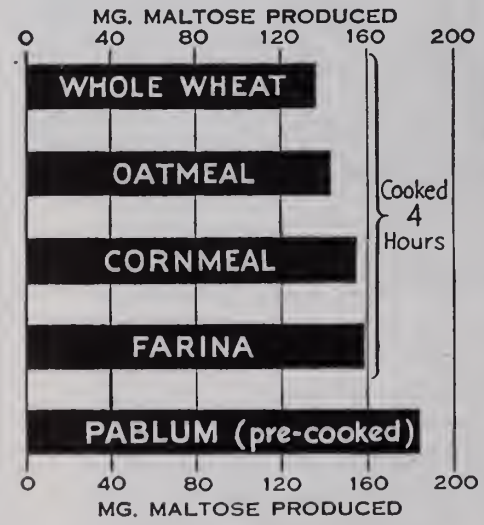

*Chart shows that maltose production is much greater for Pablum prepared with cold water than for other cereals cooked 4 hours. Ross and Burrill (Journal of Pediatrics, May 1934) conclude from this and from the total soluble carbohydrate formed that starch digestion of Pablum is more rapid than that of 6 other cereals.

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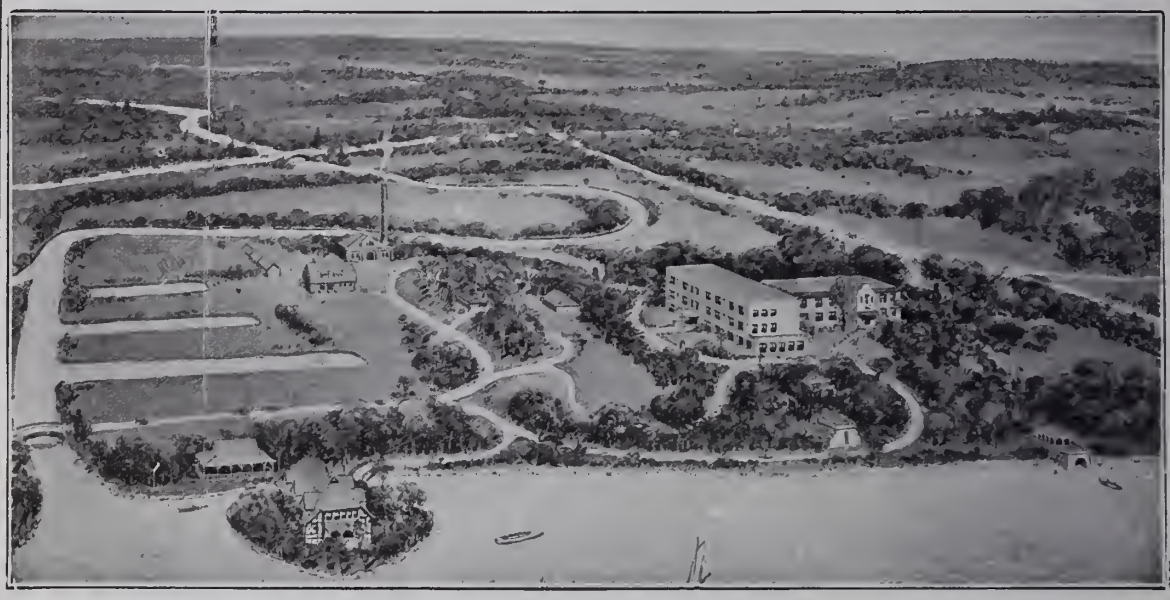

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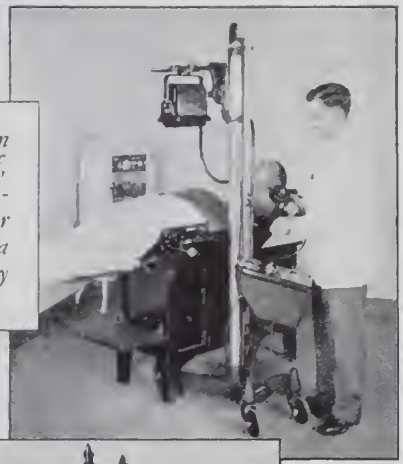

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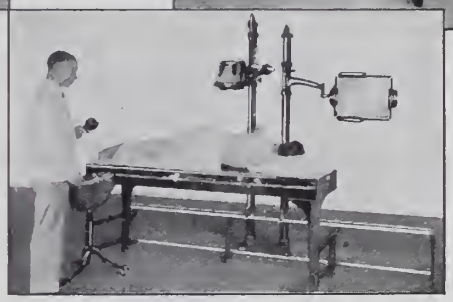

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THE WISCONSIN MEDICAL JOURNAL

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Infectious Eczematoid Dermatitis*

By O. H. and H. R. FOERSTER, M. D.
Milwaukee

THE group of varied cutaneous inflammations traditionally known as eczema has undergone radical revision in recent years. Thereby a number of new and well-defined clinical entities have been separated from the larger collective group. This has been accomplished by correlating the results of clinical studies of this group with the knowledge gained from recent advances in the fields of bacteriology, immunology, bio-chemistry, and more recently, of bio-physics.

It has been disclosed by these studies that a large proportion of the so-called eczematous inflammations are in fact fungous diseases due to such organisms as monilia and various kinds of fungi of the ringworm class. We have learned also that, although these fungous infections are largely localized in one region or another, the entire cutaneous envelope participates and undergoes a biological alteration and becomes allergic to the specific organism or to the group. In some instances an actual transport of the organisms, as well as their toxins, takes place by way of the bloodstream. This dissemination is followed by the development in distant parts of a more or less extensive eruption, named dermatophytid, a newly disclosed entity that has as its clinical parallel the tuberculid group of eruptions seen in the tuberculous subject.

Other investigations have shown that local contact with numerous chemical and plant substances may be the cause of many recurring and chronic inflammations, often with important occupational relations, and heretofore classified as eczema, which, however, cease promptly upon removal of the cause and actually are instances of simple contact dermatitis.

In addition, important advances have been made recently in enlarging and clarifying our knowledge of the important group of chronic eczematous inflammations of demonstrable allergic origin that are commonly associated with other allergic manifestations, such as hayfever, asthma and urticaria.

One of the earliest distinct clinical groups isolated from eczema is infectious eczematoid dermatitis, which is an inflammatory, predominantly staphylococcic disease, of increasing importance in practice and concerning which the general profession has had but little information. The disease, however, is encountered with sufficient frequency in almost all fields of medical practice, and it may be of such severity as to result in prolonged and complete disability, that knowledge leading to its early recognition and proper treatment should be in the possession of every physician.

In 1902 Engman[1], of St. Louis, first directed attention to an inflammatory disease hitherto considered as eczema which he recognized as having a distinctive etiology, symptomatology and clinical history, and which he designated staphylogenetic eczematoid dermatitis because of its staphylococcic origin. This study was elaborated upon years later by Fordyce[2] and also in 1920 by Sutton[3] who both placed a broader interpretation upon the disorder than did its original investigator and called it infectious eczematoid dermatitis.

It is characteristic for the disease to begin secondary to and in the immediate vicinity of an open focus of infection with pyogenic organisms, in skin bathed for a long time in purulent discharges. Therefore in its more common and mild form it may be observed about the ear in cases of suppurating otitis, on the face in cases of nasal in-

* Presented before the 93rd Annual Meeting of the State Medical Society of Wisconsin at Green Bay, Sept. 12, 1934.

fection, or in the region about a draining sinus from infected soft tissues or bone. It likewise frequently develops about an indolent ulcer, a group of discharging furuncles, or an infected or neglected cutaneous injury. It may be induced also by a simple pus infection such as a pustule following insect bites, trauma, and chemical irritation.

We have seen infectious eczematoid dermatitis occur as a complication of scabies, impetigo contagiosa, ringworm infections, and in severe cases of dermatitis venenata.

When it occurs as a complication of an occupational injury it is likely to prolong the period of occupational disability, and if an eruption of this latter type becomes generalized, considerable importance attaches itself to correct diagnosis and proper treatment not only because of the patient's welfare, but because of the questions of liability and compensation.

At the onset the disease usually is confined to a limited region and even later may not extend much beyond its original site. In all except the mild forms, however, it is common for extension to occur eventually, and in severe types the disease may be almost universal in its distribution.

Infectious eczematoid dermatitis begins with the appearance on the skin in a limited locality of several or many adjacent red and edematous macules or spots, or of soft papules, which, through increasing intensity of inflammation, develop rapidly into single or grouped vesicles and flat pustules. These rupture and thereby form oozing, raw, edematous patches varying from coin to palm size and larger. The patches tend to extend peripherally by the formation of new vesicles and pustules, or more often by an undermining of the epidermis at the margin of the patches. Adjacent patches unite to form larger areas of weeping dermatitis, surrounded commonly by many outlying single or grouped crusted vesicles and pustules. The open lesions usually discharge profusely, the fluid being thin and serous or seropurulent.

In more severe forms of the disease in which the inflammation is intense, large vesicles and pustules define the advancing edge of the patches and in a short time the epidermis may be removed in sheets from over large areas. With variation from time to time in the intensity of the inflammation, the epidermis undergoes temporary and imperfect regeneration and crust-like scales are formed, which are swept away at the next exacerbation, and the disorder may continue thus for weeks.

In mild forms of the disease, and also in the subsiding stages of the more severe forms, the patches may be dry and scaly with exudation apparent only when the covering horny layer has been split apart. In these mild types the patches of dermatitis tend to be small and few in number, and the lesions are chiefly scattered vesico-papules and pustules occurring singly or in small groups on an edematous base. In such cases a sticky, seropurulent discharge exudes from numerous points and dries into thin, varnish-like crusts which cover the affected parts.

An inflammatory edema is a constant feature of infectious eczematoid dermatitis, and in the severe forms, especially when the face or extremities are involved, the edema may be pronounced. The lymph nodes may be enlarged and tender, but do not suppurate. The subjective symptoms are relatively mild and consist chiefly of headache and chilly sensations, and itching is not as pronounced as it is in eczema. In the more extensive cases there is a slight rise in temperature, and the patient often exhibits an unusual degree of pallor.

At any period of the disease an exacerbation may occur with extension of the process as shown by the appearance of new lesions in distant parts. This extension manifests itself in one of two ways. When less severe forms of the disease become generalized, new irregularly distributed lesions appear and are of the same type as those already present. In contrast to this is a more severe form of generalization in which the lesions appear most often on the flanks and flexures, especially in the bends of the elbows and knees, and often on the cheeks and the sides of the neck. In this latter form the pustular feature is much less evident and the new lesions are almost always edematous macules or papules which by enlargement and confluence form diffuse exudative patches. These may

continue as areas of diffuse weeping dermatitis or become dry, thickened, and scaly.

Thereafter the disease follows a subacute or chronic course and continues with occasional exacerbations until through the influence of treatment healing finally occurs, which often requires many months. However, the skin remains hypersensitive to many kinds of external irritation for months afterward or perhaps for a year or more, and relapse may occur on slight provocation, but eventually the cutaneous tissues again return to a normal state.

EARLY STUDIES

In the original group of 35 cases studied by Engman, on which the differentiation of infectious eczematoid dermatitis from eczema was based, a pure culture of staphylococcus, usually of the albus variety, was isolated in every case either from the primary lesion or from the purulent exudate in secondary lesions. Later, others reported finding the staphylococcus aureus, and some found a streptococcus in the earliest and also in the secondary lesions.

Engman attempted to explain the development of eczematoid dermatitis in staphylococcic infection by attributing a different "chemotactic character" or different morphologic and chemical affinities to the strain of organism causing this infection.

Eight years later, in 1910, Fordyce published the results of his studies and explained the development of localized and generalized eczematoid lesions secondary to pyogenic infection by applying the principles of anaphylaxis. Although the condition is not one of anaphylaxis but of allergic hypersensitivity, his interpretation was correct in the light of present knowledge, excepting for the choice of terms. Fordyce recognized that the association of eczematoid dermatitis with purulent discharges was more than a coincidence and that the secondary lesions were not simply the result of autoinoculation with pus organisms. He stated that "individuals who show an increased susceptibility to irritants may perhaps be sensitized to the chemical products of pus organisms, just as patients with tuberculosis may be sensitized to tuberculin".

It is our belief that sensitization to bacterial products alone is not the only factor to be considered. Once initiated by infection we believe the predominant role in the further development of the disease, and especially in its generalization, is played by the by-products of microbic invasion, such as the proteins of broken down leucocytes, organisms, and tissue fluids. When absorbed by the superficial lymphatics these produce an allergic sensitization or hypersensitivity of cutaneous tissue that is first localized and later becomes general.

It is a common observation that if the free drainage of discharges from the lesions is obstructed for any reason, the lesions immediately affected thereby will promptly show increased inflammatory activity, and that soon afterward, often within a few hours, new lesions will appear in the vicinity and often symmetrically distributed in distant parts, indicating systemic dissemination of toxic products.

In this connection it is of interest that Engman observed that in eczematoid dermatitis the tissue reaction to the organism is of such special character as to produce in the epidermis a firm parakeratotic horny layer, which by its resistance to the free exit of fluid allows widening of the cutaneous lymph channels to occur.

Similarly, mechanical obstruction to free exit of fluid results when crusts or remnants of thick ointments, pastes, or insoluble powders are not removed and are allowed to "cake" over the discharging surface. The combination of a hypertrophic horny layer and an adherent impervious crust results in retention and damming back of the discharges whereby vascular irritability is increased, the lymph channels are widened, and absorption of tissue products is favored.

The lack of adequate drainage of the inflamed cutaneous tissues we believe is the important factor in promoting not only local extension and causing generalization of the disease, but also in continuing the state of hypersensitivity indefinitely by continual resensitization, thereby causing relapses and establishing a condition of chronicity.

In the differentiation of infectious eczematoid dermatitis from other diseases the

distinctive points are: its development in the presence of or following a local infection or an exudative inflammatory process; the character of the lesions as defined by their exudative type, peripheral extension, lack of central healing, tendency to relapse and to appear in distant parts; and the mildness of subjective symptoms, the frequency of edema and adenitis, and the toxemia present in extensive cases. These features are foreign to eczema, dermatitis venenata, simple pyogenic diseases such as impetigo and ecthyma, and the dermatitis due to fungous infections.

However, infectious eczematoid dermatitis may develop secondarily in highly inflammatory, exudative and pustular forms of all these diseases, more especially if they have been neglected or improperly managed. The features of the original disease are then usually obscured or hidden by those of the newly developed process and an exacting inquiry into the history of events is necessary to clarify the diagnosis. In cases with occupational relations a clear interpretation of such situations is especially important.

ESSENTIAL TREATMENT

The most essential measure in treatment we believe is provision for adequate drainage. This includes drainage or if possible removal of gross pyogenic foci wherever located in soft tissue or in bone, to eliminate the infecting discharges by which the disease is often induced primarily. It includes also opening of all larger vesicles and pustules, the removal of crusts, and the application to exudative areas of generous compresses soaked with a comfortably warm, not hot, non-irritating, mildly antiseptic solution. When properly used the wet compress provides an exit for the pent-up tissue fluids and inflammatory products, reverses the lymph flow and drains the widened lymph spaces and vessels, allays cellular and vascular irritability, and prevents surface blockage by drying of discharges. The compresses should be sufficiently wet to provide drainage but not wet enough to cause maceration. They are to be applied for periods of two hours and changed about every half hour, according to the degree of inflammatory activity, with intervals of two to four hours between the periods of compressing. In the intervals a sedative, slightly astringent lotion (such as the dilute solution of subacetate of lead with three per cent boric acid solution in the proportion of 1 to 8 or 6, or ½ to 1 per cent of resorcin in boric acid solution for its sedative and mildly keratoplastic effect) is to be mopped on the inflamed surface every half hour or oftener, and the parts kept exposed to the air. The use of lotions containing any considerable amount of insoluble powders, such as the ordinary calamine lotion, is contraindicated in our opinion on an acute inflammatory, discharging surface, because such lotions through their heavy content of powder often act as mechanical irritants and by caking on the surface cause retention of discharges and favor the development of infectious eczematoid dermatitis.

In predominantly pustular types the use of very dilute antiseptic solutions such as permanganate of potash, or of diluted blackwash which contains calomel, may be useful, but the ordinary chemicals with germicidal properties are as a rule highly irritant because the inflamed tissues are chemically sensitized in this disease.

As the inflammation subsides the compresses are used less often but should be applied for one hour twice daily until exudation has ceased. In the intervals the use of a sedative lotion may be continued, and ointments or soft pastes which act as sedatives and build up the horny layer, are indicated. Typical of such preparations is a soft paste containing from ½ to 2 per cent of salicylic acid. In general, thereafter the local treatment is that of a subsiding dermatitis. In cases with persistent pustular lesions 1 to 3 per cent ammoniated mercury ointment is usually effective, and Sutton has used vaccines with good effect.

Such general treatment as may be required is symptomatic, with special attention to elimination. There is no specific medication, but calcium appears to be beneficial by reducing cellular irritability. It should be given in large doses by mouth or intramuscularly for at least several weeks.

Patients with severe or extensive forms of the disease should be confined to bed and receive good nursing care, which materially

shortens the period of disability, lessens discomfort, and prevents relapses and complications.

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Neurological Surgery*

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NEUROLOGICAL surgery has come a long way since the first removal of a spinal cord tumor by McEwen in 1888. American surgery may be given the largest part of the credit for the advance in this special field of surgery, the exact nature of which requires attention to meticulous details in diagnosis and technique. The field is fundamentally a surgical one and the danger today, it seems to me, is to assume that if one is a good neurological diagnostician, or is skilled in neuropathological technique and diagnosis, he is pre-eminently fitted to practice the art of neurological surgery without having a surgical background, or what is much more important a surgical conscience and surgical judgment. As in every type of surgical therapy, it should be the aim of the surgeon to restore his patient to as near the normal physiological condition as is humanly possible. To do this to the best of one's ability means the employment of surgical principles which apply just as forcibly to neurological surgery as they do to general surgery. Without belaboring the argument further, a neurological surgeon should first of all be a surgeon, and, secondly, a surgeon who has been trained in neurological diagnosis, neurophysiology, neuro-anatomy and neuropathology. Tear away the qualifying word neurological in that statement and you will find the basis for the education of a surgeon.

Late in the last century a young man who had just recently finished his surgical residency at the Johns Hopkins Hospital asked his chief if, after spending some time in study abroad, he might return to handle the neurosurgical cases which came to that hospital. Rather grudgingly he was told that he would certainly starve to death but if he chose there would be no objection. Harvey Cushing's interest in the surgery of the nervous system had been stimulated by a poor negro patient who had been shot in the back and as a result had a paraplegia. After removing the bullet from the spinal canal, Cushing had the pleasure of watching the return of motion and sensation in that patient to the point of complete recovery. He went to Kocher's laboratory where he finished a physiological experiment upon the intracranial pressure. Sir Victor Horsley was devoting his time to the surgery of the nervous system in England and Krause of Germany and Hartley of New York had described a surgical operation for the removal of the gasserian ganglion in cases of trigeminal neuralgia, but there were no well organized clinics in neurological surgery to which a young surgeon could go. With such a comparatively discouraging start Cushing embarked upon the practice of his chosen field, but only after a fine training in surgery. After going to Boston his clinic became the mecca for young men interested in this field of surgery and above all others he has served as the stimulus and guiding genius which has stamped neurological surgery as pre-eminently American. To him alone must go the credit for the group of neurological surgeons who are at work in this country and abroad.

It would be impossible to cover the entire field of neurological surgery in an exhaustive manner in a brief communication. Perhaps you may be interested in our present conceptions of a few of the experimental and clinical problems with which my associates and I have been concerned during the past few years.

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PERIPHERAL NERVE SURGERY

Peripheral nerve surgery received a great stimulus from the experimental and clinical studies which were made during and following the Great War. Organized groups of investigators carried out experiments upon the histological features of degeneration and regeneration, and in addition devoted a great deal of their attention to the microscopic and clinical results which might be obtained by the use of various types of nerve transplants. There can be no question that, from both a microscopic and functional standpoint, an end-to-end suture is the ideal method of uniting a divided peripheral nerve. However, there are a group of cases even in civil life in which so much destruction has occurred that the defect in the continuity of the nerve trunk cannot be bridged by any of the methods in common use to effect an end-to-end union. When flexion or extension of adjacent joints, and transposition of the nerve from its normal anatomical course to a shorter one fail to make such a union possible, a serious problem in surgical procedure is presented. Several operations have been suggested, such as nerve crossing, cable transplants, suture á distance, nerve flap, tubulization and nerve transplantation. All of these with the exception of nerve crossing and, possibly, nerve transplantation have been proven to be very definite clinical failures. In peripheral nerve surgery, nerve crossing is not as feasible as it has proven to be under other circumstances because the nerve necessary to be sacrificed is usually as physiologically important as the one to be repaired.

Although nerve transplantation experiments upon animals have proven quite successful, the clinical results reported in literature have not been as promising. This is due to the fact that the largest number of the patients operated upon by transplantations were observed during and immediately following the Great War. The conditions under which the operations were performed were far from ideal; the patients have not been followed accurately; observations were made for the most part by men not trained in neurological examinations, or by individuals who had not examined the patient previously and had not witnessed the operation. Again, criteria of the success of peripheral nerve operations vary greatly between various individuals. Recovery of pin prick sensation accompanied by a protopathic response, which occurs very early in many cases in the anatomical distribution of the injured nerve, has been interpreted as clinical evidence of regeneration. Yet, Pollock has proven very definitely that such is not the case, but that it is evidence only of sensory overlap from the adjacent uninjured nerves. Many case reports of recovery of motor function following peripheral nerve suture or transplantation are in the literature which are invalidated because the movements recorded are those of supplementary motility produced by unparalyzed muscles. Therefore, it may be said that no true picture now exists concerning our knowledge of the failures or success of nerve transplantation and perhaps, even of end-to-end suture.

In an effort to add some knowledge to this subject of nerve transplantation, experiments were carried out upon animals. A portion of the sciatic nerve was removed, varying from two to four inches in length, and then resutured into the nerve trunk. In some instances the transplant was reversed and in other animals a transplant was obtained from the sciatic nerve of another animal of the same species. We found that whereas nerve fibers passed through the proximal suture line very readily and could be found within the nerve transplant, by the time they reached the distal suture line so much scar tissue had formed that they were turned back and blocked. Consequently, after varying intervals to time, dependent entirely upon the length of the transplant, we re-operated upon the animals, resected the distal suture line and again sutured it. We then found later that the nerve fibers passed completely through the transplant and into the distal segment of the nerve trunk. We believe this may very logically be the cause for the poor results reported following nerve transplantation, because after an exhaustive search of the literature we have been unable to find any reference to the employment of such a procedure.

Only recently we have had an opportunity of using this method in the case of a patient

whose tibial nerve was injured in an accident with a cultivator. A defect of three inches in the continuity of the nerve just above the ankle could not be bridged by any method. A transplant was used from the sciatic nerve of an individual whose leg had just been amputated. About 100 days after the first operation, the second stage was performed. The transplant was in excellent condition, had not shrunken in size and the proximal suture line showed a satisfactory gross appearance. Sufficient time has not elapsed to be able to report upon the functional results in this patient.

Of the cranial nerves, the facial or seventh nerve is the one most commonly injured. Stab or gunshot wounds, and inadvertent division of the nerve during a mastoid operation are the most frequent etiological factors. In only a very few cases can an end-to-end suture be employed to repair the nerve and recourse must be had to other methods. Here, in contradistinction to the peripheral nerves, the method of nerve crossing may be used without fear of producing more damage than benefit.

FACIAL NERVE LESIONS

A review of the many experimental and clinical reports upon the repair of facial nerve lesions in the literature emphasizes the fact that the spinal accessory and hypoglossal nerves have been the two cranial nerves most frequently and successfully used in such operations. I have operated upon four such cases, in three of which I have anastomosed the hypoglossal and facial nerves and in the other a spinal accessory-facial nerve crossing was performed. I am quite convinced that the results obtained with the hypoglossal nerve are superior to those which followed the use of the spinal accessory nerve. In any case, however, it is extremely important that the tone of the facial muscles be preserved so that when the nerve fibers have regenerated an effector mechanism will exist and be in readiness to carry out the impulses transmitted to the muscles. Consequently, immediately following a facial nerve paralysis one of two methods should be employed. A simple adhesive tape splint should be worn to hold the muscles up and keep them from sagging, or a fascial transplant should be placed into the subcutaneous tissues attached from the zygomatic process to the angle of the mouth and the lips. In neglected cases the latter procedure should be employed immediately. I believe that the final result following the nerve anastomosis will be more successful if the combination of fascial transplant and nerve crossing operations be used. There is little or no discomfort to the patient as a result of the atrophy of the tongue which follows section of the hypoglossal nerve.

The first evidence of return of function to the facial muscles will be noted after six to eight months when the tone of the muscles begins to improve and it is noted that the facial asymmetry is less marked. This occurs first usually in the orbicularis oculi muscle and later in the lower facial muscles. Recovery may require eighteen months to two years and in one patient operated upon definite evidences of progress are to be seen twenty-two months following the operation. At the beginning contractions of the facial muscles accompany movements of the tongue. Later the patient learns to dissociate these movements successfully. During all of the period of recovery regular and intensive physical therapy should be employed. Gentle massage and electrical stimulation to the facial muscles play a very important rôle in recovery here as well as in peripheral nerve surgery.

In view of the mediocre results reported in the use of large nerve trunks as transplants in the repair of defects in peripheral nerves, it is difficult to believe that a transplant can be laid between the divided ends of the facial nerve in its bony canal and be followed by the successful results which have been reported in the literature recently. Certainly the surgical field is a small and difficult one and there is no reason to believe that scar tissue would not block the downgrowing axons of the facial nerve even to a greater extent than is true in peripheral nerve transplants, since no direct end-to-end apposition is made between the nerve and the transplant.

TRIGEMINAL NEURALGIA

Although it was described accurately as a clinical entity in 1776 by John Fothergill,

the surgical treatment of trigeminal neuralgia has a more recent history. The early attempts to attack the gasserian ganglion by a procedure which involved resection of the zygomatic process were attended by an enormous and prohibitive mortality. As a result, palliative procedures such as alcoholic injections and resection of the peripheral branches of the nerve became popular. Unfortunately, neither of these methods produced a permanent relief from the pain and the patients always returned complaining bitterly. Then in 1890, Hartley and Krause almost simultaneously proposed the approach to the ganglion through the temporal bone which formed the basis for the present day, highly successful operation which in the hands of trained neurological surgeons entails an operative mortality of less than one per cent. The present operation consists in dividing the sensory root posterior to the gasserian ganglion, a procedure suggested by Spiller of Philadelphia who demonstrated that since the fibers had no neurilemmal sheaths as they entered the pons, regeneration could never take place. Refinements in technique have been developed so that it has become possible to perform a subtotal division of the sensory root which allows one to conserve those divisions of the nerve not involved and to preserve intact the motor root which innervates the pterygoid and masseter muscles.

Recently it has been suggested that the sensory root should be exposed by a suboccipital craniotomy because division of the root in the region of its entrance zone into the pons is followed by a loss of the pain, but there is no resulting loss of sensation. If this were true it would indeed be an ideal operation. Experimental and clinical facts are in evidence which speak strongly against such a supposition. It is an axiom that severance of nerve fibers whether they be sensory or motor in character, is followed by a loss of that function. Such results might well be possible if within the sensory root of the trigeminal nerve there were an arrangement of fibers in a topographic manner. It has been shown rather conclusively by the work of Gasser and Erlanger, Ranson, Ingvar and others that unmyelinated and the smallest myelinated nerve fibers conduct pain stimuli, while the larger myelinated fibers conduct touch stimuli. With these facts in mind, cross sections of the sensory root of the trigeminal nerve from both cats and human beings were studied. It was found that the small and large fibers are more or less regularly intermingled without any definite arrangements into topographic division. This was true in the sections near the ganglion as well as in those near the brain stem. From this experimental work, it was concluded that there is no physiologic foundation for an operation aimed at the differential interruption of certain functions by partial section of the sensory root near the brain stem. From a study of the developmental and gross anatomy of the sensory root of the fifth nerve in the human, it is obvious that the fibers which come from the various divisions of the ganglion occupy a definite position in the root in the region of its entrance zone into the pons. The fibers from the ophthalmic division lie in the inferior and medial position; those from the mandibular division occupy the superior and lateral position and those from the maxillary division occupy the intermediate zone. In a series of degeneration experiments which were performed, it seems quite evident that division of the inferior portion of the sensory root at its entrance into the pons, as has been suggested, would sever the fibers of the ophthalmic portion of the ganglion. If three-fourths of the inferior portion of the root were severed by a suboccipital approach, as has been recommended, most of the maxillary and a few of the mandibular fibers would also be sacrificed. On the other hand, if only a small section of the inferior portion of the root were made, a small number of the ophthalmic fibers would be severed and a rather large proportion of the mandibular and maxillary fibers would be left intact. Only under this condition, in the light of our investigations, is it conceivable that sensation can be conserved over most of the area supplied by the trigeminal nerve. It remains to be proved whether or not the pain of trigeminal neuralgia can be relieved permanently under such conditions.

RETURN OF SENSATION

An interesting and fertile field for the study of problems in sensation may be found in the records of the return of sensation to transplants of skin. Although the opportunities have been present for a long time, there are but few scattered reports upon the subject in the literature. It has been my good fortune to have been associated with Dr. Allen B. Kanavel and his pupils who have followed him in the study of the surgical problems of the hand. As a result, during the past fourteen years, it has been possible to study repeatedly the pedicle, free full-thickness and Thiersch grafts of skin which they have transferred from various portions of the body. All of these transplants were, of course, completely severed from their nerve supply. Some were placed over areas the nerve supply of which had been severed by the original injury and it became interesting to determine whether sensory overlap occurred in the transplants of skin as it does normally.

Briefly, it can be said that sensation returns to skin transplants in a definite and unvarying manner. Sensibility to pin prick returns first, followed closely by cold and then later by tactile sensation. Almost invariably the patient experiences an unpleasant, very painful sensation early in the course of the return of pin prick sensibility. This reaction is analogous to that described by Henry Head as protopathic sensation. As tactile sensibility recovers, this protopathic response disappears until finally sensation to pin prick is appreciated in a normal manner. The pattern of return of sensation proceeds from the periphery of the transplant and advances distally. This pattern is modified if the transplant has been placed over an area part of which has a normal nerve supply and the rest of which is insensitive. Under such circumstances the advance of sensation comes only from that portion of the transplant which lies over the innervated area. It has been our experience that return of sensibility occurs more completely and sooner in the pedicle flaps than in free full thickness or Thiersch grafts, but the rapidity of return also depends upon the amount of subcutaneous tissue which is included in the transplant. The early pedicle transplants which were thick showed a much slower return of sensibility.

Evidence is difficult to present as to the exact manner in which the nerve fibers grow into the transplants but we have some reason to believe that the regenerating fibers do not enter protoplasmic bands within the transplant. It is more likely that they enter the transplanted skin as naked unmyelinated fibers, which explains the character of the early response to pin prick stimulation, which disappears as myelin sheaths are acquired.

VISCERAL PAIN

Some years ago, while at work in Ranson's laboratory, it became of some interest to know whether or not painful impulses from the viscera traveled over the same pathways within the spinal cord as somatic painful impulses. Ranson and his workers had proved that somatic painful impulses enter the spinal cord through the lateral division of the posterior spinal roots and then ascend in the spinal cord within the lateral columns of the white matter.

Stimulation of the thoracic sympathetic trunk was used as a method of producing visceral afferent impulses. It was found that although impulses entered the spinal cord through the posterior spinal roots, they were conducted upward by relays of short spinal paths with synapses in the gray matter of the spinal cord and that only a complete transverse section of the spinal cord would obliterate them. It was realized that these experiments should be repeated, using stimuli more closely analogous to physiological visceral impulses. Dilation of the cystic duct and gall bladder was accomplished by a rubber balloon and this procedure was accompanied by marked inhibition of respiration, vomiting, struggling and other evidences of pain. The results which were obtained were identical in every respect with the earlier experiments.

These experimental facts have a definite and direct application in clinical surgery. For several years, anterolateral sections of the spinal cord have been performed for the relief of intractable pain. Although these chordotomy operations relieved pain of so-

matic origin, the pain of the visceral crises of tabes dorsalis, for example, was unaffected. In other words, if the section is limited to the anterolateral tracts visceral pain will not be relieved, but if the section is carried deeper to include the gray matter visceral pain may be relieved successfully.

It was quite natural to become interested in the mechanism of the reference and recognition of pain from visceral disease in the periphery. A number of theories exist for the explanation of just why, for example, the pain of gall bladder colic is referred to the scapular area. It has been proven that the original idea of Lennander that all visceral pain was mediated through the parietal peritoneum was incorrect. Ross has stated that either true visceral pain may be present alone or it may occur in association with pain in the skin, muscles and connective tissue innervated by the same spinal segments. Another theory accounted for pain in visceral disease as purely reflex in origin. Impulses were traced through the afferent fibers of the vegetative nervous system to the spinal cord, where it was stated that radiation occurred along the sensory tracts to the abdominal wall. Spiegel states that the impulses pass to the posterior horns of the gray matter of the spinal cord and are there diffused to the roots of the corresponding somatic nerves. Among others, Henry Head believes that in visceral disease a form of irritation is produced in the spinal cord and that sensory impulses from other parts passing into this segment are so exaggerated as to be painful.

Recently, Weiss and Davis, and Lemaire have been able to relieve the pain of angina pectoris, gall bladder colic and other intra-abdominal lesions by the subcutaneous infiltration of procaine hydrochloride solution in the peripheral area to which the pain is referred. Pollock and I have some experimental evidence to support these clinical observations in that the evidences of pain produced in an animal by dilation of the cystic duct are definitely altered by section of the intercostal nerves. As a result of other experiments, the details of which need not be given here, Pollock and I have suggested that visceral painful impulses produce efferent cutaneous reflex effects, which in turn liberate a metabolite in the skin which is painful. These somatic painful impulses are in turn carried into the cord and to consciousness over the well known somatic afferent pathways.

SYMPATHETIC NERVOUS SYSTEM

Emphasis on the rôle of the sympathetic nervous system in the production of pain has resulted from the clinical reports of the relief of such types of pain as angina pectoris, causalgia and other abdominal pains by various surgical operations. For example, Jonnesco has relieved the pain of angina pectoris by the removal of the middle, inferior cervical and first thoracic ganglions of the left sympathetic chain. Abdominal pains have been relieved by section of the abdominal sympathetic nerves, and the sacral portion of the sympathetic trunk has been resected for the relief of pain in inoperable carcinoma of the uterus. Although pain may be produced by stimulation, or relieved by severance of suitable parts of the sympathetic nervous system, there is no agreement as to the physiologic mechanism involved. Painful impulses may be conducted along the sympathetic nerve fibers, or the viscero-motor or other reflex activities may produce conditions which in turn are responsible for conscious pain. On the other hand, both mechanisms may be present.

In a series of experiments to determine the rôle of the sympathetic fibers in the production of pain in the face, Pollock and I found (1) stimulation of the cervical sympathetic trunk does not produce pain and (2) that stimulation of the superior cervical sympathetic ganglion produces pain. The latter fact holds true after section of a large number of anterior and posterior spinal roots, beginning with the first cervical segment. It is also true after section of the anterior spinal roots and section of the sensory root of the trigeminal nerve. Pain could not be produced, however, by stimulation of the isolated ganglion after section of the posterior spinal roots and the sensory root of the trigeminal nerve. It is probable, therefore, that stimulation of the superior cervical sympathetic ganglion produces an effect which is carried by way of postganglionic efferent

fibers to the structures innervated by the sympathetic fibers. These efferent impulses produce an effect on the skin and other structures the exact nature of which is as yet unknown. It is quite possible that this effect is linked with the sympathetic innervation of the blood vessels and that a metabolite is liberated which in turn stimulates the ordinary sensory nerve endings of the fifth nerve. This impulse is then transmitted centrally and is recognized as pain. The relief of pain of visceral disease elsewhere in the body by severing sympathetic fibers may very well be upon an analogous basis.

The sympathetic system was discovered only recently by the surgeon and although surgical empiricism may be fraught with danger, in some instances it has provided the stimulus for sound physiological work which has either corroborated or disproved the rationale of a given operation. The most recent wave of surgical interest in the autonomic nervous system dates from the conception that spastic paralysis might be relieved by section of the sympathetic supply to the involved limbs. That this was a misconception has been proved by a large number of investigators in both clinical and experimental fields. However, it was noted that the skin of the extremities became warmer after such an operation and if the removal of sympathetic supply was complete this effect would persist. Consequently, attention was directed to the vascular diseases of the extremities the pathogenesis of which was little understood, and the classification confused; but the treatment of which was uniformly unsuccessful. The fever test, injection of peripheral nerves, and other methods now provide accurate means of determining before operation whether or not sympathectomy will be followed by vasodilatation. Certainly it has been well established that periarterial sympathectomy will not remove the sympathetic nerve súpply to a vessel except in the local segment operated upon. Therefore, removal of ganglia or the sympathetic trunks are the types of operation which offer the most successful results in this group of cases.

Just how far surgical attacks upon the sympathetic nervous system may go is hard to say, particularly if we think in terms of a few, as yet uncompleted experimental facts which I wish to present in conclusion, concerning the interrelation between the various glands of internal secretion, the autonomic system and carbohydrate metabolism.

Interest in the pituitary gland was stimulated greatly by the work of Cushing first in the experimental laboratory and later in his clinic. Later, Philip Smith working with rats was able to show that if he removed the hypophysis without injury to the neighboring structures he produced an animal far below weight, of diminutive stature, with atrophied testicles and atrophy of the other glands of internal secretion, particularly the thyroid. If, on the other hand, he produced a lesion of the tuber cinereum the rat became enormously obese. There followed also a hypogonadism but the other endocrine glands remained normal. Smith and also Evans were able to produce in rats the symptoms of gigantism and acromegaly by feeding anterior lobe extracts daily. The importance of these experiments in connection with the clinical symptoms of hypopituitarism and hyperpituitarism characterized by acromegaly, gigantism and Fröhlich's syndrome cannot be overemphasized.

Recently, Houssay reported a group of experiments on dogs in which he removed the hypophysis and then later performed a pancreatectomy on the animal. To the astonishment of scientists those hypophysectomized animals did not develop a diabetes mellitus as do otherwise normal animals. Houssay was able to show that if he later fed these hypophysectomized-pancreatectomized dogs anterior pituitary lobe extract he could produce a hyperglycemia and glycosuria of extremely high grade.

The controversy as to whether or not the effects produced following experimental hypophysectomy are due to removal of the gland or to injury of adjacent parts of the mid brain, such as the tuber cinereum, has been a long and bitter one. There is no question but that it is difficult to remove the hypophysis experimentally in animals unless one chooses the lower vertebrates for experimentation. In the dog or cat it is a difficult procedure. Therefore, we have undertaken

a series of experiments in which we have made lesions of the hypothalamus, that is in the tuber cinereum, with the Clark–Horsley stereotaxic instrument. This is a device by which a minute electrolytic lesion may be placed at any point within the entire brain by the adjustment of micrometer scales and the use of an anatomical chart prepared in Ranson's laboratory for the cat's brain. Such lesions were made and after the animals had completely recovered and the blood sugars were normal, the pancreas was removed completely. Whereas in the normal cat following removal of the pancreas a very high blood sugar results immediately and the animal dies unless kept upon large doses of insulin, such animals ran normal blood sugars on a standard laboratory diet. The very careful serial neuropathological sections of these animals' brains showed no lesions in the hypophysis. Houssay's experiments were corroborated on several cats in which a lesion of the hypophysis was made deliberately. These experiments suggested that perhaps in making a lesion of the hypothalamus we interrupted the nerve supply to the pituitary gland which has long been established anatomically. On such an explanation both groups of experiments could be correct.

It has been shown by Dandy that the pituitary body received a supply of sympathetic nerve fibers which undoubtedly had their cells of origin in the superior cervical ganglion. Cushing, Goetsch and Jacobson had also shown that stimulation of this ganglion with a faradic current for a few seconds was followed by a glycosuria, provided the animal had an available glycogen supply. At that time these observers did not have at their command simple or accurate methods for determining blood sugars and therefore were unable to report upon that aspect of their problem. They did show further, however, that stimulation of the sympathetic trunk was not followed by glycosuria. These experiments have been repeated and elaborated. There is no question but that a pronounced glycosuria and a rise in blood sugar to double the normal value can be produced by faradic stimulation of the superior cervical ganglion. This cannot be produced by stimulation of the trunk, by stimulation of the vagus or other peripheral nerves. We have also produced a glycosuria and hyperglycemia by stimulation of the stellate ganglion, although the effect is not as marked. This result is obtained regardless of whether or not the sympathetic trunk is divided above or below the ganglion. In another series of experiments a lesion was made in the hypothalamus and the superior cervical sympathetic ganglion was then stimulated. Provided the lesion is made in the correct area, a glycosuria or hypoglycemia do not develop. Glycosuria does not develop after stimulation of the superior cervical sympathetic ganglion if both sympathetic splanchnic nerves are removed.

It is always difficult to correlate knowledge provided by the laboratory with clinical experience. Many times our records of patients fail to record what later becomes of great interest to us to know; in other instances we do not know for what to search. There are many clinical examples of the relationship between the various lobes of the hypophysis and a neural mechanism in the hypothalamus. Besides the question of carbohydrate metabolism, there is the occurrence of diabetes insipidus, adiposity, thermal regulation, pathological sleep and states of hypoglycemia. On the contrary, it may be asked why does one see many cases of intracranial tumor, in which as a result of secondary hydrocephalus the walls of the third ventricle may be so ballooned out and thinned that degeneration must invariably occur, without any recognizable clinical manifestations? To the influence upon carbohydrate metabolism of this rather well-defined neuro-hypophyseal mechanism, is added the relationship of the autonomic nervous system and the thoracic and abdominal viscera.

We have as yet no evidence which would lead to any information regarding the source of the carbohydrates mobilized in these experiments. The work of Griffith led him to believe that hyperglycemia may develop from stimulation experiments without involving the pancreas, thyroid, parathyroid or the hypophysis, provided the adrenals are intact. As a corollary, Houssay, Biasotti and Rietti have reported that the diabetogenic action of anterior lobe extract may be observed in the absence of the pancreas, hypophysis, thyroid,

ovaries, testicles, splanchnic nerves, lumbar sympathetic chains, adrenals, or a lesion of the tuber cinereum. They concluded, however, that the liver alone was necessary.

Certain it is that there is evidence enough to throw some doubt upon the idea that the islets of the pancreas have an independent secretory control over carbohydrate metabolism. It is well established that typical lesions exclusively characteristic of diabetes have not been found in the pancreas. In fact, Allen has observed changes in the pancreas described as characteristic of diabetes in almost fifty per cent of cases in which there was no diabetes. It would indeed be strange if Nature had concentrated the control of such a vital function in one organ. It is more logical to believe that sugar disposal is more carefully safeguarded by perhaps multiple mechanisms.

DISCUSSION

Dr. Erwin R. Schmidt (Madison): This paper shows very clearly several things.

It calls attention to a field of medicine which all too often is included in the field of general surgery. The remarks regarding the necessity of being neurologically minded are extremely important. That advances have been made in this special field are due to the fact that men interested in this subject spent a life time at it, developed a surgical technique, and, concomitant with this development, enhanced the physiologic field and built up a clearer idea of the pathology. This information has been built up so that clinically it is available to those men so trained.

That further advances are being made in other fields by coordinating the knowledge, the speaker has illustrated as in the question of diabetes. At the present time we have been working on syringomyelia. From the text books we have our present knowledge and have reached a status quo that may be satisfactory to some when a diagnosis has been reached. We have a series of cases treated surgically in whom there has been a decided benefit. It means to us that the question of syringomyelia is not completed and that these unfortunate people may still be aided.

It used to be that, when a tic douloureux came in, the patient usually had lost all his teeth, tonsils were out, and all the nasal surgery possible had been done. Now we find cases coming in whom the diagnosis has been made early and a great deal of surgery avoided. The treatment as outlined by the speaker relieves these people of the intense suffering. We have followed a definite procedure. When seen early, these people have not reached the stage where pain is so intense that the loss of sensation to the cornea and the possibility of a keratitis following a posterior root section will be accepted. In our experience we have found it advisable to proceed slowly. They are examined for foci of infection, which includes the teeth, tonsils, and sinuses. After these have been taken care of, we usually advise alcohol injection of the branches involved. We use a preliminary injection of morphine (usually intravenous) and then infiltrate the path to the foramen ovale and foramen rotundum with novocaine solution ½%. When the nerve has been reached 1–2 cc. of a 70% alcohol is injected. The percentage is considered high if the first injection is successful in 50 per cent of the cases. The injection may have to be repeated once, twice, or three times, but the patient is usually given relief. This relief may be permanent; on the other hand, it may persist from six months to five or six years. The relief from the second injection usually lasts about half as long as the relief from the first injection, and, by the time the third is attempted, there is a great deal of scar tissue and injection may be impossible. By this time the patient has become accustomed to certain amounts of anesthesia in the face and, because of the intense pain, is ready to accept anything; the anesthesia of the cornea and the danger of a trophic keratitis, or a traumatic keratitis, will be accepted if only relief may be obtained. For the operative measures, we believe, as does the speaker, that the surgical approach and the surgical measures have been so standardized that the mortality is very low and the relief complete. There are cases where there is no relief as pointed out by Cushing and which he called central trigeminal neuralgia. There is no way of diagnosing these cases before operation.

I cannot help but emphasize a certain field of neurological surgery. Here, as in other fields, the early diagnosis is most important. We are analyzing one hundred and sixty-seven brain tumors which we have had at the State of Wisconsin General Hospital. The question of the time elapsing between the onset of symptoms and the time of the diagnosis will be very important. (In carcinoma of the rectum we have completed such a survey and with the astonishing result that the great majority were diagnosed and treatment begun within one week from the time the patient was seen by the physician.) In neurological surgery the classical symptoms of headache, vomiting, and choked discs should call one's attention to the fact that these are evidences of an increased intracranial pressure. The finding of the etiological factor may be simple or very complicated, and the combination of the neurologist and neurosurgeon is necessary.

The control of intracranial pressure, since Weed and his co-workers pointed the way, has been a great boon to neurologic surgery as pointed out by the speaker. This is as much to neurologic surgery in the treatment of cranial injuries as the work of Kanavel in hand infections was to industrial surgery. The day of routine decompressions for cranial injuries is gone, and the habilitation of this type of patient greatly improved. What happens in a great many of these unfortunates can be beautifully shown by encephalograms.

The speaker has shown very clearly how important

this field is and how advances are being made; how important it is to be neurologically minded and trained in diagnosis and surgical technique. He has pointed out some specific instances which are very important. I have enjoyed his paper greatly.

For further discussion see page 325.

Neuralgia of the Trunk and Extremities*

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IN DISCUSSING this subject I shall attempt to be as practical as possible and not indulge in any entangling controversies. Bing has described neuralgias as pains which occur in attacks and radiate throughout the territory of distribution of peripheral nerves. It is a known fact that in a large majority of the so-called neuralgias no microscopic disturbance of the peripheral nerves has been found. Oppenheim has suggested that these neuralgias are due to some nutritional disturbance of the peripheral nerves. Other men find a congestive hyperemia of the nerve sheath. The term perineuritis has been used to describe these so-called nerve pains.

Irritation of the lower cervical and upper dorsal roots may present a group of symptoms that are characteristic of angina pectoris. These individuals may be invalided and distressed for weeks without receiving any relief with the usual remedies. Investigation reveals no disturbance of the cardiac mechanism. The patient may complain of severe pain over the left chest. Frequently these pains radiate down the left arm. The pain may be of a constant dull character and again it may be sharp and stabbing with symptoms of anxiety and apprehension. Neurological examination may show no definite objective symptoms except some coarse tremors of the out-stretched fingers and cold, clammy hands. If we stop here and are ultra-physchiatrically minded we may attempt to alleviate the symptoms by suggestion and explanation on the basis of a psychoneurosis. On the other hand, an investigation of the complaint of posterior neck pain may, with the help of x-ray, reveal a comparatively recent cervical arthritis. Pleurisy of the chest, tumors of the breast and fractured ribs must also be considered in our differential diagnosis.

We may find a so-called Horner's syndrome, that is, a contraction of the left pupil with some narrowing of the palpebral fissure. When one discovers this syndrome there should always be an investigation of the last cervical and the first dorsal spines because in this region there will frequently be found a definite arthritis. I believe that our orthopedic friends will agree with me that in many cases of cervical arthritis there is a complaint of sharp pains referable either to the precordium or the scapular area on certain movements of the head. There often is spasm of the trapezius with some alteration of movements of the lower cervical spine. Sensory changes are uncommon, as the involved nerves, that is, the long thoracic, the long sub-scapular and the internal and external thoracic nerves contain no sensory fibers to the skin. I believe this symptom complex is of interest because only too often the unfortunate patient is labeled with the diagnosis of heart trouble. He may go from one doctor to another without any relief. He restricts his pleasures and amusements, becomes introspective and apprehensive and eventually may drift off into the hands of the Eddyists or chiropractors, there to gain new strength and courage.

An irritation of any one or more of the seven lower intercostal and the first lumbar nerves may produce the symptoms of pain and tenderness referable to the anterior abdominal wall. I am certain that every physician has frequently had the experience of having patients with the typical textbook picture of acute appendicitis. That is, fever, high leukocyte count, nausea and vomiting and pain and tenderness over the right lower abdomen. Untold numbers of these patients have submitted to an appendectomy. Many

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times the appendix showed little pathology and often symptoms of parietal pain and tenderness persisted long after the surgical lesion had completely healed. I am satisfied that in many of these cases other factors were at work. An upper respiratory infection with chills and fever might well produce systemic changes resulting in intercostal neuralgia of the abdominal wall. An acute arthritis, herpes zoster, fractures of the vertebral body may all produce an irritation resulting in symptoms of abdominal pain.

ABDOMINAL PAIN

Many patients have been erroneously diagnosed as having a chronic appendicitis and the offending organ has been removed without any relief of symptoms. Careful investigation might reveal an abdominal intercostal neuralgia due to some chronic foci of infection. It is also said that other conditions such as a visceroptosis, a chronic spinal arthritis, Pott's disease, scoliosis and excessive lumbar lordosis, and malignant disease of the vertebra may produce symptoms of chronic parietal pain and tenderness.

Abdominal pain and tenderness has frequently been mistaken for gall bladder symptoms, duodenal or pancreatic lesions. Dr. Carnett states that numerous abdominal explorations have been made without finding any explanation for the symptoms. This situation is probably due to failure to recognize parietal location of pain and tenderness.

The pain of the abdominal intercostal neuralgia may appear in any part of the abdomen, but probably more often on the right side. It may be continuous or recurrent. The tenderness is usually widespread. At times the pain is very severe and the patient may be unable to stand even the slightest palpation. Other times the tenderness may be so mild that it cannot be elicited without using considerable force in palpating the abdominal wall. Dr. Carnett, in his thorough and scientific study of this subject, has recommended certain simple tests that may be used in eliciting parietal tenderness. The abdominal wall must be palpated with the patient holding the muscles tense at the time of the palpation. This method prevents the eliciting of any intra-abdominal discomfort. Tenderness may be found along the offending nerve trunk. An area of skin hyperesthesia or hypesthesia may be found by the usual sensory tests. Pinching of the skin and subcutaneous fat may locate the area of discomfort. In testing for neuralgia of the lower abdomen the tenderness may be found not only over the lower abdomen but also over the sensory distribution of the ilio-inguinal and ilio-hypogastric nerves. That is, the point of tenderness to pinching is over the upper thigh running parallel to Poupart's ligament and over the upper buttocks.

My purpose in briefly discussing this subject is to emphasize the necessity of careful examination of the abdominal wall in every case of suspected intra-abdominal lesion. I do not believe that one cannot have an intra-abdominal lesion in the presence of parietal disturbance. I also do not wish to leave the impression that the surgeon, in the presence of a suspected acute intra-abdominal lesion, should in any way relax his caution. I still believe that it is far better to be mistaken and find a normal appendix than to hesitate and later find possible rupture or peritonitis. On the other hand, I believe that numerous abdominal explorations for suspected chronic appendicitis might be eliminated if these simple tests for parietal pain and tenderness were made.

SCIATIC PAIN

Sciatic pain is described as a painful condition following the course of the sciatic nerve and involving one or both extremities. In the majority of cases the pain is not noticed along the course of the sciatic trunk, but along the posterior-lateral part of the thigh and then continuing along the course of the perineal nerve.

Trauma in the region of the sacroiliac joint, tumors of the sacrum and lesions in the pelvis have all been accused of causing this condition. Toxic processes, vertebral disease, syphilis, tuberculosis, typhoid fever and gonorrhea are also said to produce sciatic pain. There is also mentioned flat feet and diseases of the rectum. The condition is almost invariably relieved on standing or lying down and increased on walking, sitting and exposure to cold. The pain usually comes on

in paroxysms and is often worse at night. Again, there may be free intervals, but usually the patient complains of a continuous, dull ache along the course of the nerve. There is often tenderness along the course of the nerve especially at the point of exit over the pelvis, in the popliteal space and at times behind the external malleolus. Another important diagnostic sign is to have the patient lie horizontally. The examiner flexes the member at the hip with the leg in extension at the knee. On elevation of the part beyond fifteen degrees or twenty degrees there is, in a large majority of the cases, the complaint of pain over the posterior thigh which disappears as soon as the part is again flexed at the knee. The common explanation of this sign is that it is produced by stretching of the nerve. Freiberg states that anatomic studies reveal that the nerve is not stretched until extreme flexion of the thigh is attained. Novocaine injections of the sciatic trunk, however, have no effect on this sign, while epidural or sacral anesthesia will cause the sign to disappear. Freiberg believes that this sign is due to tension on the piriformis muscle which bridges the sacroiliac joint. He concludes that the muscle is put upon a stretch with only a few degrees of straight-leg flexion and that any irritation in the sacroiliac joint or inflammatory process in the muscle itself may produce the symptom of pain.

In walking, the patient attempts to protect the involved leg by placing most of the weight on the sound member. There is also the desire to walk with the member slightly flexed at the hip and knee.

In a true sciatic neuralgia there is no disturbance of skin sensibility. There is motor weakness, no atrophy or change in tonicity of the muscles and no abnormality in the tendon and plantar reflexes. Electrical reactions are always normal. In a true sciatic neuritis there is an increase in symptoms. There is hyperesthesia or anesthesia in the distribution of the nerve, especially in the perineal nerve. The achilles reflex is diminished or absent. If the neuritic lesion is more extensive there may also be some diminution of the patellar reflex. There is also flaccidity or atrophy, especially of the muscles of the external compartment of the leg. There is weakness or absence of dorsal flexion of the foot and toes and there is diminution or absence of reaction to faradic stimulation of the involved muscles.

I am not prone to use the term sciatic neuralgia because I am convinced that with further pathological study of these symptoms, there will be found a more illuminating explanation for this picture. For want of a better description I prefer to use the term sciatic pain. I have necessarily only touched upon the subject of sciatic pain as this symptom is worthy of a paper in itself. I do, however, wish to emphasize that we must always investigate the region of the sacroiliac joint as a possible pathological source of sciatic pain.

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For discussion see page 325.

Neuralgias of the Head and Neck*

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NEURALGIA is a paroxysmal attack of pain in the course and distribution of a peripheral nerve or its branches. It is a symptom and may herald an organic disease, yet for months and years be the only manifestation of that disease. It may be the expression of a constitutional disturbance of a mild neuritis or the result of some circulatory or toxic change in a given nerve or its sensory ganglia. Neuralgia, or, more truly, psychalgia, may be an hysteric or psychogenic symptom. But whatever be the origin

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of the symptomatic neuralgia, there are many instances in which one must be satisfied not to know the basic process. From neuritis, in which the pain may be similar, neuralgia may be distinguished shortly by the more continuous character of the neuritic pain with rapid development of sensory and motor signs revealing the true nature of the disease.

The neuralgias, as most commonly recognized as clinical entities and as we will discuss them here, are the following:

1. Chronic paroxysmal trigeminal neuralgia, (tic douloureux, trifacial neuralgia).
2. Vidian neuralgia (Sluder's neuralgia, sphenopalatine or Meckel's ganglion neuralgia).
3. Neuralgia of the Seventh Nerve (geniculate neuralgia, tic douloureux of the geniculate ganglion, neuralgia facialis vera, Hunt's neuralgia, otalgia, matridalgia).
4. Herpes zoster of geniculate ganglion (zoster auricularis, herpes oticus).
5. Painful tic convulsif.
6. Glossopharyngeal neuralgia (tic douloureux of glossopharyngeal nerve).
7. Atypical neuralgias.
8. Occipital neuralgia.

Because of the numerous anastomoses of the branches of the fifth, seventh, and ninth nerves which bear various types of sensory impulses, as well as the role of the sympathetic system fibers with respect to the transmission of pain, it is rather difficult to precisely localize anatomically the various neuralgias. (See Gray's Anatomy, pg. 899).

Chronic paroxysmal trigeminal neuralgia, more commonly but less descriptively known as tic douloureux or trifacial neuralgia, is the commonest and the most important condition in the group.

HISTORICAL

The condition has been known for centuries and was described by the Arabian physician, Avicenna, (1000 A. D.). The name "tic douloureux" was applied by Nicolous Andre in 1756. The first undoubted description was by John Locke in 1677. Fothergill described the condition in 1776 and his nephew, S. Fothergill, in 1804, collected 52 cases from the literature. Previous to 1900, aconite, belladonna, and opium were used without great success. In 1891, Hartley and Krause devised ganglionectomy. In 1898 Spiller reported division of the sensory root of the gasserian ganglion and with Frazier in 1901 reported on experiments showing the advantage of this over ganglionectomy. Alcohol injection was reported by Peters and Winger in 1902 and by Achlosser in 1903. In the same period Cusing developed a technic for cutting the sensory root and for avulsion. Since then the palliative treatment has consisted of alcohol injection and radical treatment of division of the sensory root.

In tic douloureux the maxillary division of the nerve is most commonly affected, the ophthalmic division the least. The interval between paroxysms varies from days to years. The pain is sharp, shooting, piercing, or tearing to such a degree as to cause the affected individual to lose interest in everything, to lacrimate, to salivate; his face is distorted by muscular spasm, the pupils dilated, and the face suffused with blood. "Trigger areas" otherwise known as dolorogenic zones, are present; these are spots on the face where stimulation by touch, cold wind, swallowing or talking may induce the paroxysms. From trigeminal neuralgia tic douloureux is distinguished by its paroxysmal character and the presence of the trigger zones. It is the tendency of the attacks to become more frequent, the free intervals shorter until the patient is glad to accept any type of relief.

The cause of the neuralgia is unknown. There appears to be no familial influence. Age is a factor, as it most often begins between forty and sixty. Focal infection cannot be said to ever cause true tic douloureux. Delicate tests fail to reveal objective disturbances in either sensory or motor functions of the trigeminal. Dandy believes that the lesion is always in the sensory root and not in the gasserian ganglion or peripheral branches of the nerve because:

(a) Tumors or other lesions along the course of the sensory root at times cause typical tic douloureux; (b) Tumors contiguous to the gasserian ganglion (but not including the sensory root) have not caused tic douloureux although they may cause trigem-

inal neuralgia without the characteristic paroxysms; (c) tumors and infection of the peripheral branches of the trigeminus never cause tic douloureux; (d) operation (via temporal route) upon the gasserian ganglion have never disclosed pathologic findings; (e) pain jumps between points in different branches without affecting the entire sensory distribution of the original branch as is the case with known lesions of the gasserian and its branches; (f) tic douloureux can be cured by cutting only certain fibers in the sensory root thereby leaving other types of sensation more or less intact.

For all of this, the intrinsic nature of the process usually remains undisclosed although the relationship to aberrant vessels, patches of multiple sclerosis, or tumors is, of course, significant in many instances.

In the treatment of trigeminal neuralgia, dental cavities, sinusitis, and pterygomandibular arthritis must be sought for and removed. Since the war it has been customary to try inhalations of trichlorethylene as it was discovered that workers in this material sometimes developed numbness over the distribution of the fifth nerve. Twenty or thirty drops inhaled from a handkerchief may give relief. The method is worthy of trial mainly because of its simplicity, but experience has been rather disappointing. Glaser, however, reports a case of bilateral trigeminal neuralgia where a week's treatment was followed by no return in two years. As to other methods of treatment, Ausch reports favorable results from the use of the cold quartz lamp, the advantage of which, as compared to older methods of irradiation, is that the second and third divisions may be approached from the oral side. Brockheler employs fever therapy, his method depending on injections of protein material from nonpathogenic organisms of the colon group.

In true tic douloureux recourse to proper surgery without such procedures as useless wholesale removal of the teeth is probably the proper course. Three general types of surgical treatment have been in use for some time: (a) avulsion; (b) alcohol injection of the peripheral nerve involved; (c) partial or complete section of the sensory root of the gasserian ganglion. Peet considers avulsion as never indicated,—with the possible exception of the supra-orbital—as alcohol gives equal relief and leaves no scar. The duration of relief following deep alcohol injection varies from six months to two years, averaging nine months. The injection may be repeated but formation of scar tissue makes infiltration of the nerve successively more difficult and the duration of relief shorter with each injection. Harris has had experience with alcohol injection of the gasserian ganglion, the chief danger of which, according to Dandy, is the passage of alcohol into the cerebrospinal fluid with attendant danger to the brain stem.

Most neurosurgeons feel that since section of the sensory root offers the only permanent relief it is indicated in every case of major trigeminal neuralgia. Advanced age and renal or cardiac disease are usually not contraindications. Partial or complete section of the sensory root in skilled hands carries a mortality of only one-half of one per cent. However, certain sequelae occasionally follow, as: (1) Keratitis and corneal ulcerations; (2) loss of all forms of sensations; (3) facial paralysis. Netherton reports a case in which a permanent flush with periodic exacerbations of exudative inflammation appeared a year after operation. He was unable to explain the situation except on the basis of a neurotropic disturbance.

Considerable discussion has obtained among neurosurgeons as to the relative advantages and disadvantages of the temporal and cerebellar approach to the sensory fifth. The latter is recommended by Dandy, but only for the most skilled operators, because (1) no corneal disturbance follows the operation; (2) there is never loss of the motor branch; (3) sensation is well preserved; (4) hemiplegia, aphasia, and epilepsy do not occur; (5) in bilateral cases it is less to be feared because it does not imperil the muscles of deglutination. MacKenzie finds partial section of the sensory root by the temporal route more satisfactory than complete resection. Because of the number of eye complications, he condemns complete section except in the few instances where pain begins in the first division. The cerebellar approach of Dandy, he feels, is especially indicated where

it seems likely that both the trigeminal and glossopharyngeal nerves must be cut or where the presence of a small angle tumor is suspected.

Vidian neuralgia is defined by Vail as pain of neuralgic character in the nose, face, eye, ear, neck and shoulder occurring in severe attacks; these cannot be caused by an external stimulation, are not relieved by opiates, and are not associated with subjective loss of sensation. The attacks are most typically unilateral, are often nocturnal, and may be associated with the subjective symptoms of nasal sinusitis. The pain is not along the trigeminal divisions but is diffuse behind the root of the nose, in the eyes and over the face and cheek. A very similar clinical picture was described by Sluder as sphenopalatine or Meckel's ganglion neuralgia. Vail, however, feels that Sluder was in error in attempting to differentiate sphenopalatine and vidian neuralgia, believing, rather, that the symptoms described are due to an irritation or inflammation of the vidian nerve and not to any direct affection of the sphenopalatine ganglion. As the vidian is very closely related to the floor of the sphenoid it is reasonable that inflammation of the sphenoid sinus would cause inflammation of this nerve. The distribution of painful symptoms in vidian neuralgia is largely explained by the fact that the great superficial petrosal nerve, coming from the geniculate ganglion of the facial nerve, and the great deep petrosal coming from the carotid plexus and connections of the glossopharyngeal, form the vidian. From the sphenopalatine are orbital, nasal, and palatine branches which explain the referred pain in the eye, nose, and teeth.

Vail believes that treatment should be directed toward disease in the sphenoid sinus and in mild and recent cases he injects the sphenoid sinus with iodized poppy seed oil following the use of ephedrine; also one may employ douching and colloidal silver preparations. Acute attacks are relieved by cocaine pledgets applied against the anterior wall of the sphenoid. Severe cases require submucous resection back to the sphenoid with such trimming of the turbinates as may allow an opening in the sphenoid sufficient to deal with any inflammatory condition present.

Neuralgia of the Seventh Nerve involves the sensory distribution of the seventh nerve. This sensory root is otherwise known as the pars intermedia or nerve of Wrisberg, or as the thirteenth cranial nerve. This nerve shortly enters the geniculate ganglion from which connection is made with the sphenopalatine (Meckel's) ganglion and thence to branches of the fifth nerve by means of the great superficial petrosal nerve. Beyond the geniculate the sensory portion lies for a short distance with the facial nerve proper and then emerges as the chorda tympani which joins the lingual nerve and carries the sense of taste from the tongue. Deep pressure sense over the entire face is carried by the seventh nerve. The seventh nerve also anastomoses with the glossopharyngeal. What the role of the geniculate in neuralgia in the region of the ear may be has been much discussed but the wide distribution of these nerve symptoms arising from them would hardly be confined to the auricle and external canal.

The onset of seventh nerve neuralgia is sudden, the pain severe and fairly constant. The pain is always located in some portion of the ear but may extend into the trigeminal field or into the cervical region.

Aside from the more usual forms of neuralgic treatment the condition may be approached surgically by section of the sensory seventh through a cerebellar approach; this method is favored over geniculate excision because of the lessened danger to the facial nerve.

Herpes Zoster of the Geniculate Ganglion involves the rather limited cutaneous zone about the ear supplied by geniculate fibers. Clinically there are mild prodromal pains referred to the auricle, external canal, or middle ear. The pain may become extreme and slight temperature, malaise, and nausea may be noted. The characteristic vesicles over the external auditory canal and the tympanic membrane appear on the third or fourth day, often become purulent, then desiccate; in the course of two weeks all signs except a few pigmented scars have disappeared. Although the pain usually subsides with the cutaneous

lesions it may persist as a post-herpetic otalgia which, in the aged, may be severe or permanent. In this event it is likely that the treatment of choice is section of the sensory roots (pars intermedia).

The condition known as *painful tic convulsif* is a spasmodic contraction of the facial musculature accompanied by severe neuralgic pains. It is rare and of unknown etiology but its probable site is the geniculate ganglion. In Cushing's case, relief was afforded by cutting the facial and destroying the geniculate only to return in six months over a spinofacial anastomosis which had been performed to correct the facial paralysis. Theoretically, section of the pars intermedia should cure the condition.

GLOSSOPHARYNGEAL NEURALGIA

Glossopharyngeal Neuralgia is characterized by paroxysms of excruciating pain in the sensory distribution of the ninth cranial nerve. Its true etiology is unknown although similar pain results from irritation of the nerve by intra and extracranial tumors. The glossopharyngeal gives off five branches: (1) tympanic or Jacobson's nerve; (2) pharyngeal; (3) muscular; (4) tonsillar; and (5) lingual of which the muscular supplies only the stylopharyngeus and, therefore, section of the glossopharyngeal causes no demonstrable paralysis.

Weisenburg, in 1910, first described the symptoms of this neuralgia in a case of cerebropontine angle tumor. The patient had trifacial neuralgia which was relieved surgically but this failed to relieve the neuralgia in the distribution of the ninth. Secord and Robineau first described true glossopharyngeal neuralgia and Doyle reported the first series of cases in this country.

Typically, the patient, without warning, experiences a sudden, sharp, knife-like pain in the base of the tongue, the tonsillar region, the posterior pharynx, or about the ear. The painful attack lasts but a few seconds but tends to recur in paroxysms. These paroxysms may recur at intervals of hours, days, or months; the longest free interval recorded is about three years. The pain is usually unilateral, on the same side, and approximately in the same location. Although pain may appear spontaneously, talking, laughing, coughing, rubbing the ear or surrounding areas, and especially swallowing cold fluids are likely to precipitate an attack. Trigger zones are often present in the involved areas. The patients live in constant fear of an attack even during periods of remission and since swallowing food may precipitate an attack, often go without adequate nourishment. Most of the attacks are diurnal but they may awaken the patient at night. The diagnosis depends entirely upon the history and no help is to be expected from physical examination or the laboratory. At present it is impossible to differentiate true glossopharyngeal neuralgia from that caused by a tumor until other evidence of a tumor appears. However, the indications for surgical treatment are essentially the same in either case.

Actual section of the glossopharyngeal nerve is the only method by which permanent relief can be obtained. Alcohol injection has been attempted but is not to be considered because of the great danger to the internal carotid artery, jugular vein, spinal accessory, vagus and cervical sympathetics. Neurosurgeons consider intracranial section by the cerebellar route the approach of choice as it is simpler, safer and precludes the possibility of regeneration with return of pain.

In *Atypical Neuralgias* of the face psychogenic factors are of great importance and concern the relationship of the ego, the face, and the personality. The face is a finely tuned mechanism and it is not surprising if reverses, difficulties, and disappointments may produce in an hysterical individual phenomena of distressing character referred to the face.

Glasser notes certain characteristics, i.e., the pain does not follow the peripheral distribution of a particular nerve and therefore seems unrelated to an anatomic disturbance; it usually extends beyond the trigeminal distribution; it is usually pulling and drawing in character and it is usually deep-seated in the orbit, cheek, or temple; also, it is seldom intermittent although variable in intensity.

Such cases are occasionally operated on; viz., removal of the sphenopalatine ganglion or section of the sensory root of the fifth has

been performed without relief. Such cases may apparently be relieved by recourse to the cults. Investigation of the sensory supply of the face has been carried on by Hunt, Fay, Davis, Dandy, and others. Of special interest is the experimental work of Davis and Pollock with cats. They concluded that stimulation of the superior cervical sympathetic ganglion produced pain in animals; the appreciation of this pain is affected by stimulation of the efferent sympathetic fibers, the results of which, in turn, stimulate ordinary accepted sensory pathways in the cranial nerves. They found it necessary to section the posterior cervical roots as well as the fifth nerve in order to obliterate sensation when the cervical sympathetic is stimulated. It seems that the nerve supply of the areas involved in the atypical neuralgias involve the posterior cervical roots of the tenth, ninth, seventh, and fifth nerves. The mechanism involved in atypical neuralgia may be much the same as in migraine and the condition is probably to be differentiated from the neuralgias of the individual cranial nerves which are to be regarded as entities.

From a series of seven cases, Wilson concluded that in addition to the characteristics mentioned above there were certain others. (1) The emotional disturbance and the behavior are out of proportion to the symptoms. (2) The personality of these patients is often similar in type, i.e., they are sensitive, egotistical, and self-centered, usually sublimating for a feeling of inferiority. (3) Their physical well-being seems almost impossible in the presence of such pain; this suggests that the pain acts as a paranoid delusion which enables them to exteriorize a painful conflict and so protect the personality and benefit bodily functions. Some cases he feels are psychogenic in origin, some are part of a developing psychosis, and some are based on a more superficial conflict. With Davis and Pollack he feels that the pain is probably caused by a sympathetic disturbance transmitted into pain by the sensory nerves. In the treatment psychotherapy is probably of first importance, as there is disturbance due to intrapsychic conflicts usually centering about the loss of self-esteem. The pain leaves when the conflict is solved.

OCCIPITAL NEURALGIA

Pain in the region of the occipitalis major and auricularis magnus may be neuralgic but is more often symptomatic of some underlying condition. The pain tends to radiate toward the occiput or vortex and is often bilateral. It is aggravated by coughing, laughing, and movement of the head. A tender point is frequently noted half way between the atlas and the mastoid tip. In the diagnosis it is important to rule out cervical caries and upper cord tumors; infection of the tonsils, teeth, and sinuses may be important and it is to be distinguished from the dull occipital headache which frequently accompanies hypertensive states and errors in refraction. The prognosis in the condition is usually good, when proper attention is given to the underlying state along with sedative drugs and physiotherapy. In many instances alcohol injection gives relief and is worthy of trial in the more severe cases.

A review of fifty-two of our own cases illustrates the relief which alcohol injection may give. Five of six trigeminal and ten of thirteen occipital neuralgias obtained definite relief. Avulsion gave only temporary relief in the occipital case where it was tried and in one trigeminal case it was unsuccessful not only in the first instance but when it was tried again on the regenerated nerve.

In considering the foregoing it seems that for most neuralgic cases encountered in private practice, the use of drugs, physiotherapy, and alcohol injection are an armamentarium worthy of adequate trial in the average case. Attention to foci which appear to be real foci is also worthwhile. However, in the cases of well established tic douloureux, both of the trigeminal and glossopharyngeal, too enthusiastic elimination of teeth is to be discouraged. It is no doubt wrong if we, as practitioners, create excessive fear of proper surgery in the minds of these patients, as the neurosurgeon has established his right as well as his ability to cope with one of the most distressing situations which people are called upon to bear.

DISCUSSION

Dr. E. W. Ryerson (Chicago): Some of the cases with deposits in the subdeltoid or subacromial bursa

or in the tendon of the supraspinatus muscle suffer such intense pain, in spite of heat and large doses of salicylates, that they require surgical relief.

An incision through the skin, with the separation of the fibers of the deltoid muscle, will reveal a shining white membrane which, when opened, allows a mass of semi-solid white material to exude. This, when being rolled between the fingers, has a slightly crystalline feeling, and is composed usually of pure calcium carbonate. Upon recovery from the anesthetic, these patients usually are completely relieved. I feel that in cases of this type, with extreme pain and disability, this simple operation should be performed more frequently than has been done in the past.

I shall describe briefly a case in mind. A middle-aged woman had been in bed for three weeks with such intense pain in the shoulder that she required morphine constantly. Heat and salicylates gave no relief. A prominent neurologist considered it a neuritis and advised multiple blisters with the hot cautery. The woman's condition was truly pitiable. An x-ray film showed a deposit in the bursa. After explaining the condition to the neurologist, we took the patient to the operating room. A small incision was made through the skin and the fibers of the deltoid muscle separated. A white shining membrane appeared. As the roof of the subdeltoid bursa was cut through, out came a mass of creamy substance. When I picked it up and felt of it between my gloved fingers, there were little crystals in it. Most of the deposit was curetted out.

When the woman came out of the gas anesthetic she said, "My pain is all gone." That night, for the first time in three weeks, she had a perfectly comfortable sleep without any narcotic and went on to a rapid recovery.

I thought, necessarily, that it was the subdeltoid bursa I had cut into, but, as the years went by, other men began writing about it, and it appears now that many of these deposits are in the supraspinatus tendon, which in so many cases has been pulled loose from its attachment to the tuberosity of the humerus.

But what difference does it make to you whether it is in the tendon or subdeltoid or subacromial bursa, as long as we know what to do about it? That patient was one of quite a good many.

A few years ago, I went to another hospital in Chicago and saw another woman who for two or three weeks had been under exactly the same treatment as in the case before described. They did not use the actual cautery. Immediately after the incision and evacuation of this mass of white substance, this patient was relieved of the excruciating pain and made a rapid recovery. A number of our authors seem to have found cholesterin or some other substances in these deposits, but in my cases it has been purely calcium carbonate.

The last case I saw was in the latter part of July. A young athletic man who had been playing tennis and golf found his shoulder becoming painful. He was unable to sleep for a week with this pain before he saw me. He could not get into a comfortable position.

The x-ray showed a similar deposit. Under a local anesthetic I separated the fibers of his deltoid and removed only a small amount of substance, because with the best local anesthesia I could produce in this man it still was very painful for him to have me dig around in the shoulder joint. Yet the cutting through of the encapsulating layer of this deposit relieved him entirely. He went home that night and slept perfectly and had an uninterrupted recovery.

Do not forget that there are two types of this deposit. In one, as Dr. Schumm said, it is a slow, chronic process which under heat and rest will disappear. Diathermy, apparently, in the course of two or three weeks, will cause a disappearance of this deposit in many cases. I suppose the chalk is taken up by the blood stream and is carried away.

But why submit these people to three weeks of torture? They are in as much pain as you can imagine from almost anything except a trigeminal neuralgia or a kidney stone. They are entitled to relief if it can be done so simply and safely.

The reference to the sacro-iliac subluxations was also interesting, because those things do occur. Of course, the majority of the pains in the fifth lumbar region and the sacro-iliac region are due to a low grade arthritis. Those cases can be relieved by the method he has outlined.

The other type is where there is a distinct subluxation.

For many years, we rather jeered at the ideas of osteopaths and chiropractors and thought there was not very much in it. I was taught, when I was a medical student at Harvard, that the sacro-iliac joints were so solid and interlaced that they could not become moved, and yet some of them can.

If there is a bilateral sciatic pain, it is usually not due to sacro-iliac looseness or lipping or disturbance, but to a lumbo-sacral disturbance. If it is a one-sided sciatica, it may be a sacro-iliac joint. We are still on the verge of discovering something real about these lumbar conditions. There was a major in the army who was in Chicago for many years who twice a year, almost regularly, would come to my office bent over, walking with his hands on his back. He would say, "Something slipped in my back."

We would go to the hospital, give him a gas anesthetic, forcibly bring the knee straight up on his belly as far as we could, drop it down and bring the other one up. We would roll him upon his face and hyper-extend both thighs. As soon as the gas was out of his system, he would get up, bend over and say, "I am all right now."

That was not arthritis, not any disease, but a slipping of one of the joints. After many years of disbelieving in that, I am compelled to believe they do slip sometimes. I know the fifth lumbar does in a good many cases.

As Dr. Schumm said, the question is between applying apparatus, corsets, braces, or performing operations to fuse these joints together. I was very much interested in his story of some of the cases

because it reminded me of one of our biggest surgeons in Chicago, both from the medical standpoint and from the standpoint of dimensions. He is an enormous man, six feet three, probably weighing 270 pounds. He was playing football with some children. Suddenly he felt a terrible pain in his back and had to be put to bed. He stayed in bed for three weeks with very intense pain.

He was in bed three weeks with heavy traction on the right leg, because it was a right-sided-sciatic pain. It was no better than the day when he was first taken home. It was evident the traction was not doing much.

We took him to the hospital and put an enormous plaster cast on him, from the axilla to the toes of his right foot. He had to be anesthetized to be placed on the Hawley table to have the cast put on, because it was too painful for him to rest on the hip support and on the table. We gave him gas.

As soon as the cast had set and the anesthetic was discontinued, he opened his eyes and said, "I feel fine." He felt fine from that day on. We kept the cast on for several weeks. When the strapping and other things do not help, put a big plaster cast on them if they are big people, a small plaster cast if they are small, and it will help them a great deal.

Dr. V. W. Koch (Janesville): In regard to trigeminal neuralgia, I had an interesting case of a woman sixty-five years of age. This patient was a severe diabetic, running a high blood sugar constantly, but never put on insulin. She was supposed to be controlled with diet. This woman suddenly developed a bilateral trigeminal neuralgia which kept up for a period of two or three weeks. Morphine was necessary to control her pain.

When I was in London, I saw two of these cases. Dr. Purves Stewart informed me a bilateral trifacial neuralgia is usually due to diabetes. This case was put on doses of insulin and when the sugar in her blood decreased, her trifacial neuralgia was absolutely relieved.

In regard to the neuralgias of the lower extremities, we must not overlook arteriosclerosis in which we have involvement of the ileac vessels, destroying the vascular supply and giving the ischemic paralysis that develops with exercise.

Dr. H. W. Virgin (Madison): In regard to the treatment of a sacro-iliac syndrome, I worked with a well known surgeon recently who has followed a method described by Baer in which he treats the patient with a maneuver similar to one Dr. Ryerson described, except, I believe, the treatment is a little more rigorous.

The patients describe the usual symptomatology of the condition and frequently relate having spent months and years under different managements in an attempt to obtain relief.

The patients, in these cases, are anesthetized by novocain given spinally and are placed on the table thoroughly conscious. The anesthetic is allowed to take hold. The thigh is flexed on the trunk as far as possible, done quite slowly over a period of from fifteen to twenty and sometimes thirty minutes, depending chiefly upon the severity of the case. It is interesting and sometimes very frightening to hear the loud cracking reports that emanate from the region of the hip. These have been thought to be adhesions which are broken up by the acute flexion, the toes being brought down to the table over the patient's shoulder. The patients themselves, although frightened, can usually be reassured.

Some twenty-eight cases have now been done in that fashion and relief has been obtained in the predominance of cases. Only two untoward results have occurred, both of them being foot drops seemingly resulting from a rupture of the peroneal nerve.

The patient, after manipulation, is placed in a bilateral spica or cast and allowed to remain with the legs in fair abduction for a period of twelve days, after which the cast is removed.

The condition of flat back which is so often found in these cases also seems to be relieved by this maneuver, and the patient, subsequent to becoming released from the confines of her cast, will be found to have a normal lordosis.

I, myself, have never performed one of these manipulations alone but have been witness to many of them and also assisted in many of them. I feel it is worthy of consideration before such treatment as the severance of nerves is undertaken.

The Management of Abortion*

By R. S. CRON, M. D. and A. H. LAHMANN, M. D.
Milwaukee

ABORTION is a welcome termination in many cases of pregnancy as is evidenced by chances women take to rid themselves of a pregnancy. On the other hand, it is often a sad disappointment and as Watkins[1] has stated, causes much unhappiness. Watson[2] has estimated that 30 to 40 per cent of all pregnancies end in abortion during the first six months of intra-uterine life.

A study has been made of 693 consecutive cases of abortion entering the Milwaukee County Hospital during 1932 and 1933 and 102 private patients cared for in Milwaukee

* Presented before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, September 1934.

and Columbia Hospitals. Omitting 94 patients, who were threatened abortions and were discharged undelivered, and 5 who were not pregnant, there remained for consideration 594 county hospital and 102 private patients. The term abortion in this study includes pregnancy from its earliest conception through the twelfth week of fetal life. The two groups will be studied separately and the methods of treatment and end results are compared.

The average age of the private group was 28½ years approximating the 29-year average of the county hospital group. The youngest patient in this latter group was 14 years and the oldest 47. The average number of days the private patients were confined to the hospital was 8 while the county patients remained for 11.23 days. This longer period of time can be accounted for by way of the fact that even greater conservatism was practiced in the treatment of this latter group. Also financial economy was possibly of some importance to the non-indigent group. Criminal abortions, especially in the private group, necessitated hospitalization much longer than those classified as spontaneous. The shortest time in the hospital for any patient was 2 days and the longest for private patients was 55 days in comparison with 162 for county patients.

TABLE I

	Private	County
Age Range		
Range	19–42	14–47
Average	28½	29
Hospital Days		
Range	3–55	2–162
Average	8	11.23
Criminal	11½	13.2
Non-Criminal	6½	10.74

The criminal interruption of early pregnancy has been estimated by many authorities to be as high as 50 per cent. It is extremely interesting to observe that in our two groups studied the incidence in both was about 25 per cent. Dividing these into those induced by an abortionist and those by intrauterine manipulation on the part of the patient, we find that almost 15 per cent of the private group experienced instrumentation by physicians, mid-wives, nurses, quacks and others, while 114 or 19 per cent of the indigents were self-induced. This latter group used slippery-elm and orange-wood sticks, catheters, wires and medicines—ergot, quinine and turpentine were the drugs most commonly administered. As is proven in the study of the etiology of abortion in these two groups, we find that the patients who could afford to pay for interference sought the services of the abortionist while the patient who was determined to interrupt her pregnancy did so by her own ingenuity or advice from her friends.

TABLE II

Etiology	Private No. Cases	Private %	County No. Cases	County %
1. Criminal	15	14.71	15	2.53
2. Self-Induced	10	9.80	114.	19.19
3. Spontaneous	77	75.49	442	74.41
4. No Etiology			23	3.87
	102	100.00	594	100.00

The two groups were analyzed according to the marital state. It was found that about 16 per cent of the criminal and self-induced abortions were in married women in both groups while almost 8 per cent of the private patients were either unmarried or separated from their husbands. Apparently the unmarried patient was able to obtain the service of an abortionist proportionately more often than was her married sister.

TABLE III

Marital Status		Married Pr.	Married Co.	Single Pr.	Single Co.	Divorced Pr.	Divorced Co.	Widow Pr.	Widow Co.	Separated Pr.	Separated Co.
Criminal	No.	9	9	6	5	--	1	--	--	--	--
	%	8.92	1.52	5.88	0.84	--	0.17	--	--	--	--
Self-Induced	No.	8	91	6	14	--	5	--	1	1	3
	%	7.84	15.32	0.98	2.36	--	0.84	--	0.17	0.98	0.51
Spontaneous	No.	72	408	4	22	1	7	--	2	--	1
	%	70.59	68.69	3.92	3.70	0.98	1.18	--	0.34	--	0.17

There were 18 private and 94 county cases classified as threatened abortions which did not, as far as we know, terminate as incomplete or complete abortions. The 102 private and 594 county patients, above referred to, were divided into infected incomplete and complete and non-infected incomplete and complete abortions. In both groups the non-infected incomplete abortions were most prevalent. The non-infected complete group were proportionately more than twice as common in the county group due to the fact that operative interference was not carried out until the patient had every opportunity

of spontaneously emptying the uterus. Therefore the higher incidence of 27.5 per cent infected incomplete abortions in the private group in comparison with 14.5 per cent in the county group can be accounted for by way of the more active treatment and somewhat earlier interference in this former group.

TABLE IV

Type	Private No. Cases	Private %	County No. Cases	County %
1. Infected Incomplete	28	27.45	86	14.48
2. Infected Complete	5	4.90	55	9.26
3. Non-Infected Incomplete	56	54.90	275	46.30
4. Non-Infected Complete	13	12.75	175	29.46
	102	100.00		
5. Missing	5		3	.50
			594	100.00
6. Threatened	18		94	
7. Inevitable	5			

The convalescence of the patients in these two groups is almost parallel as far as fever is concerned. Sixty-eight per cent of the private and 70 per cent of the county hospital patients were afebrile. About 1.4 per cent of the private patients had fever for only one day while about 23 per cent of the county group were definitely febrile for a longer period.

TABLE V

Course in Hospital	Private No. Cases	Private %	County No. Cases	County %
1. Febrile	19	18.63	136	22.90
2. One Day Fever	14	13.73	40	6.73
3. Afebrile	69	67.64	417	70.20
4. Missing	--		1	.17
	102	100.00	594	100.00

As might be expected the convalescence as judged by chills and fever was much more stormy in the abortions classified as criminal and self-induced. The average percentage of these two groups for both the private and county hospitals was around 58 per cent febrile in comparison to the 25 per cent febrile recoveries in the spontaneous abortions.

TABLE VI

	Cases		Private Cases	Private %	Cases		County Cases	County %
Criminal	15	Febrile	7	46.67*	15	Febrile	9	60.00†
		Afebrile	8	53.33		Afebrile	6	40.00
Self-Induced	10	Febrile	7	70.00*	114	Febrile	55	48.25†
		Afebrile	3	30.00		Afebrile	59	51.75

* Average of 46.67% and 70.00% is 58.34%.
† Average of 60.00% and 48.25% is 54.13%.

TABLE VI—Continued

	Cases		Private Cases	Private %	Cases		County Cases	County %
Spontaneous	77	Febrile	19	24.68	442	Febrile	110	24.90
		Afebrile	58	75.32		Afebrile	332	75.10

Pain, chills and fever were the most common symptoms. Chills were recorded in 26 patients. Bleeding was present in the majority of the patients and sufficiently severe or the patient so anemic or septic that 12 private and 41 county patients were transfused, one or more times.

Complications were much more severe and common in the indigent group—anemia was present in 154 patients and graded as severe in 36 of the combined groups. Only one private patient developed peritonitis followed by rupture of a pelvic abscess into the rectum. The only other serious complications in this group were pulmonary embolism in a patient with pelvic peritonitis and phlegmasia alba dolens. Both of these patients and two others who had a parametritis were classified as criminal abortions. There were 22 county patients with peritonitis, 7 with septicaemia, 17 with inflammatory lesions involving the uterus and adnexa, 16 with syphilis and many others with less complicating lesions.

Post-abortal infection begins within the uterus and almost always at the placental site. Organisms are always introduced into the uterine cavity during instrumentation but the infection, however, depends on the virulence and dosage of the infecting organism and also the resistance of the patient. The streptococcus as well as other organisms may be present but the former is usually the cause of death. The gonococcus may complicate the picture. It is the subsequent instrumentation either by the abortionist, patient, or overly anxious physician that spreads the localized infection beyond the barrier built by nature. The infection extends outward through the blood vessels or lymphatics and infected thrombi may become dislodged and circulate in the blood stream. Infection through the lymphatics may spread to the peritoneum and pleura and much later reach the blood stream through the thoracic duct. Invasion of the peritoneal cavity does not take place through the tubes excepting when complicated by gonoccocal infection. Here we

have an endosalpingitis instead of a perisalpingitis as is the case with the streptococcus. Exudates about the uterus rapidly develop resulting in parametritis or more extensive cellulitis. Resolution may occur followed by tubo-ovarian or posterior cul de sac abscesses. Perforation of the uterus is not uncommon. Usually the area is rapidly walled off and no complication develops unless the intestine has been injured. The uterine contents removed show in all stages necrosis and infection. There were no pathological diagnoses of hydatidiform degeneration.

TREATMENT

In the management of abortion there are two groups advocating different procedures. One group practices immediate evacuation of the uterus in every incomplete abortion unless perimetrial complications are present. The other group and the one utilized by most gynecologists practices a more conservative management. They build up the patient's resistance and wait until the temperature has been normal for at least 48 to 72 hours before invading the uterus. In the meantime the contents are frequently expelled. This rule is violated only if there is dangerous uncontrolled hemorrhage.

The routine treatment of abortion patients at the Milwaukee County Hospital follows: (1) Complete history and physical examination. (2) Sterile speculum examination. (3) Digital or ring forceps removal of any products of conception that may be seen or felt at the external os. (4) Routine lysol, potassium permanganate or mercurochrome gauze packing following removal of products of conception. These packings were usually in the cervical canal and the vagina. (5) Pituitrin and packing when the hemorrhage is brisk in the threatened and incomplete abortion. (6) No invasion of uterine cavity under any circumstances when the patient is febrile. (7) Ergot and quinine in all complete abortions and in incomplete abortions until the patient is afebrile for 48 hours. (8) Routine blood counts. (9) Routine macroscopic and microscopic examination of all tissue expelled or removed. (10) Absolute rest in bed. (11) Elevation of head of bed. (12) Ice cap to pelvis. (13) No vaginal douches. (14) Codeine or morphine for pain. (15) Fluids such as glucose or saline as needed. Under this regime 210 or 35.3 per cent of the indigent patients were treated without invading the *vagina* while an additional 248 or 41.8 per cent were managed without invading the *uterus* making a total of 458 or 77.1 per cent. The latter group experienced packing of the cervix and vagina, digital or ovum forceps removal of the products of conception, followed by packing or vice versa, or simple digital manipulation. The uterus was invaded and the interior emptied by dull curette or ovum forceps and followed by packing or packing followed by one of the above procedures in 136 or 22.9 per cent of patients. As was indicated above, the private group was treated more actively. There was no invasion of the uterus in 31 cases equal to 30.3 per cent, while an ovum forceps or curettage followed by packing was utilized 31 times and curettage only in 20 more giving a total percentage of 69.7.

TABLE VII

Treatment	Private Cases		
Conservative	1. Spont. Expulsion	16 or 15.6%	
	2. Packing	15 or 14.7%	30.3%
Active	1. Curettage & Packing	51 or 50.0%	
	2. Curettage	20 or 19.7%	67.7%
		102	

Treatment	County Cases		
Conservative	1. Spont. Expulsion	210 or 35.3%	
	2. Packing	91	
	3. Packing & Digital	60	
	4. Digital & Packing	66	
	5. Digital Removal	31	458 or 77.1%
Active	1. Packing & Curettage	56	
	2. D&C Packing	64	
	3. Packing, Digital, D&C	16	136 or 22.9%
		594	

There were 18 deaths in the county hospital series and no deaths in the private group. It must be admitted that the county hospital patients were as a group more difficult to manage due to the fact that many entered the institution dangerously ill and frequently in extremis. Twelve of these 18 patients had experienced criminal or self-induced abortions and all died of peritonitis, septicemia, or a combination of both. The cause of three of the remaining deaths was peritonitis or septicemia and the others were the result of pneumonia, hemorrhage and rheumatic heart disease, respectively. The

patient who died of a rheumatic heart disease was curetted and died from cardiac decompensation 41 days later. The hemorrhage patient had two transfusions two days before expiring. These two were the only ones in whom the uterus was invaded.

TABLE VIII

Analysis of Deaths — Gross Mortality — 18 deaths out of 594 cases 3.03%

Etiology	Total Cases	Mortality	Per Cent
1. Criminal	15	4	26.66
2. Self-Induced	114	8	7.02
3. Spontaneous	442	6	1.36

All but 3 died of septicemia or peritonitis
3—Lobar Pneumonia.
Hemorrhage.
Rheumatic heart with decompensation.

Seven of the fatal cases were in the hospital for four days or less before death. Therefore it is quite evident that 40 per cent of the mortality rate should have to be excluded in arriving at a true percentage for this group. Any treatment one might have instituted would have been of little benefit.

TABLE IX

Hospitalization of Fatal Cases

7 cases in for 4 days or less	Average	3 days
5 cases in between 5–10 days	Average	7 days
3 cases in between 10–20 days	Average	15 days
2 cases in between 30–35 days	Average	31 days
1 case in for		41 days

The majority of patients who died were classified as infected incomplete abortions. Nine of these eleven deaths occurred in patients who admitted performing on herself or permitted an individual to perform on her a criminal abortion.

TABLE X

Analysis of Deaths—Continued

Non-Infected Incomplete and Non-Infected Complete

	Non-Infected Incomplete			Non Infected Complete		
	Total Cases	Mortality	%	Total Cases	Mortality	%
1. Criminal	15	0	--	15	--	--
2. Self-Induced	114	1	0.87	114	--	--
3. Spontaneous	442	2	0.45	442	--	--
		3	1.32			

Infected Incomplete and Infected Complete

	Infected Incomplete			Infected Complete		
	Total Cases	Mortality	%	Total Cases	Mortality	%
1. Criminal	15	3	20.00	15	1	6.66
2. Self-Induced	114	6	5.26	114	1	0.87
3. Spontaneous	442	2	.45	442	2	0.45
		11	25.71		4	7.98

COMMENT

An interesting observation was the rapid decline of temperature after the expulsion of the uterine contents. This is due to a cessation of absorption of the infected and necrotic contents under increased pressure. The use of oxytoxic drugs to assist in the spontaneous expulsion of the contents should be mentioned. The administration of fluids by mouth and intravenously to support the shocked, dehydrated, and anemic patient should also be emphasized. Frequent blood transfusions are undoubtedly of the greatest value in combating hemorrhage, septicemia, and peritonitis. Vaccines and serums were not used because of their questionable value.

The incidence of criminal abortion in these two groups of patients has been stated as being approximately 25 per cent. Undoubtedly the true percentage is higher for all patients will not admit intra-uterine interference to the interne who usually takes the patient's history. The seriousness of this procedure is not appreciated by women and it is doubtful if any amount of education, publicity, and exhortation will deter these desperate women from taking steps which may cost them their lives or permanently invalid them for their remaining days. It has been claimed and is still being taught that the only solution to this problem is further and broader instruction in methods of contraception. This may help the situation but it is very doubtful if it abolishes the practice of self-induction of abortion. The essayists are of the opinion that one of the facts gathered from the study of these cases is that conservative management of incomplete abortion affords the very best results. Here we have a group of 458 out of 594 abortions where treatment was successfully carried out without invasion of the uterine cavity. The idea, that both layman and physician has, that such uteri should be evacuated, is fallacious. It may be argued that the death rate was high but until one has studied each death one does not realize the hopelessness of the situation in each one of these fatalities.

At least, if one practices conservatism, the patient is permitted to develop an immunity to her infection and the wall of protection in

(Continued on page 350)

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« « « EDITORIALS » » »

The Problem of Tonsillectomy

WITHIN the space of a few weeks we shall be entering an annual period which is lightly (too lightly in many instances) referred to by no small number of the profession as the "tonsil season." It would seem timely, therefore, to review in the light of evidence accumulated by those members of the profession, notably Kaiser, Nissen, Mosher, Jones, and others who have done the most work in this field, why and when tonsils should be removed.

The function of the lymphoid tissue known as the tonsils is not definitely known, but of the various functions ascribed to the tonsils, the cytogenic function and the one which suggests that healthy tonsils help to confer immunity by protection against bacterial invasion, seem most plausible. Clinical experience seems to support the contention that in young children under six years of age, healthy tonsils have a protective function.

Clinical experience has also shown, however, regardless of the fact that no definite function can be ascribed to the tonsils, that there are very definite indications for the surgical removal of tonsils. In general, tonsils which give rise to mechanical obstruction, and those showing evidence of infection, are justifiable indications for tonsillectomy. Not all large or hypertrophied tonsils cause obstruction, while on the other hand, marked obstruction may result from tonsils not evidently hyperplastic. Due consideration must be given to the subjective complaints along with the physical examination to arrive at a reasonable criteria for or against operation. Naturally, no real benefit can accrue in instances in which tonsils are removed without definite indication.

There is perhaps no disagreement among physicians as to the advisability of removing infected tonsils, but there is plenty of room for disagreement as to whether or not the tonsils are actually infected. The clinician may recognize certain abnormal conditions in tonsils which will aid in making a decision of a normal or a diseased tonsil. According to Kaiser, we may assume infection present when there is: "(1) Escape of pus from crypts when pressure is applied to the tonsil; (2) An enlargement of the tonsillar gland behind the angle of the jaw, varying in size, and sometimes tender; (3) A purplish-red tinge limited to the anterior faucial pillar; (4) Abnormal preponderance of leucocytes in material from tonsillar crypts, frequently accompanied by general hyperemia of the pharyngeal and palatal mucosa. Cultural studies of the tonsils are helpful in

making the diagnosis of diseased tonsils where specific infections are suspected."

There is small doubt but that tonsillitis, peritonsillar abscess, and cervical adenitis are due to infection of the tonsils.

Frequent sore throat is perhaps the most common of all complaints referable to the tonsils, and is benefited by tonsillectomy more often than any of the other numerous complaints attributed to the tonsils.

Frequent head colds and purulent otitis media are not appreciably benefited by tonsillectomy, however, in cases of both these conditions, adenoidectomy has a decidedly more beneficial effect, especially in cases of the latter condition in individuals under three years of age.

Such complaints as unexplained attacks of fever, recurrent attacks of hoarseness, nosebleeds and headaches have been attributed to the tonsils. End results in cases with these complaints show quite definitely that the tonsils were not responsible for these clinical complaints.

Systematic infections in many instances may have their inception in the tonsils, and in any case where it is definitely known or reasonably suspected that the tonsils are the focus, they should be removed. In cases of rheumatic fever, the bulk of evidence points to less frequent attacks in cases of tonsillectomized children, and also in cases of this condition, recent studies show that the mortality was twice as great in rheumatic children whose tonsils were still in, compared with those whose tonsils had been removed prior to the rheumatic infection. Observations show a definite decrease in the incidence of diphtheria, and to a lesser degree scarlet fever, in tonsillectomized children. The incidence of complications in the latter were less frequent and less severe. Tonsillectomy has no effect on the incidence or severity of measles.

Evidence would indicate that laryngitis, bronchitis and pneumonia occur with greater frequency in tonsillectomized children than in those whose tonsils have not been removed.

Malnutrition, anorexia, cyclic vomiting, and chronic fatigue may be evidence of a low grade chronic infection originating in the tonsils, but before advising tonsillectomy for relief of symptoms in these cases, all other possible causes should be considered. If none are found, tonsillectomy is perhaps not only justifiable but desirable.

Even when there are definite and positive indications for removal of the tonsils, there exist, even under the most favorable conditions, possibilities for unexpected complications, so that at no time should unnecessary risks be taken. In cases of hemophilia, leukemia, severe anemia, or Hodgkin's disease, operation should not be undertaken. If thymic disease is suspected, no operation should be performed without an x-ray of the chest. Operation is also contra-indicated in the presence of, or immediately following acute infections such as acute head colds, acute tonsillitis, acute otitis media, acute bronchitis and acute nephritis. An extension of the infection or a septicemia may complicate the operation in such cases. In acute rheumatic heart disease, no good can be accomplished by tonsillectomy, and further embarrassment to the heart may result. Experience has shown that in acute chorea, tonsillectomy is likely to intensify the symptoms, therefore, operation should be deferred until after the acute symptoms subside.

A few years ago it was almost universally believed by members of the profession, that any child was better off without tonsils. It seemed as though there was no sound argument against prophylactic tonsillectomy. Now, however, with sufficient clinical evidence behind us, we have changed our attitude regarding tonsils, and their treatment. We should not, on the other hand, be influenced by this same evidence, as are some, to underestimate the importance of the tonsils as a factor in disease. The failure to secure favorable results following tonsillectomy is largely due to a wrong diagnosis, and so, as with other conditions which are treated surgically, the decision of operation for removal of tonsils usually rests with the clinical judgment based upon the physical findings and symptomatology. The operation for surgical removal of the tonsils should in all cases be given serious thought before being undertaken, and should never be thought of as a minor procedure to be entered into lightly or indiscriminately. C.W.A.

Society Proceedings

BROWN-KEWAUNEE-DOOR

The April meeting of the Brown-Kewaunee-Door County Medical Society was held in conjunction with the Outagamie, Winnebago and Fond du Lac county societies on April 25th at the Northland Hotel. Following the dinner at six-thirty, a symposium on "Diabetes" was presented. Discussions were made by Drs. E. J. Kepler and H. K. Gray of Rochester, Minnesota.

CHIPPEWA

The regular meeting of the Chippewa County Medical Society was held at the Hotel Northern, Chippewa Falls, Thursday evening, April 11th. A large audience listened to a fine program.

Mr. E. Kaminski, director of poor relief for Chippewa County, talked on the present status of relief. He was not at all optimistic as to the future because so many are being educated to expect support from the government.

Dr. S. E. Williams of Chippewa Falls gave his annual talk on his impressions of the annual postgraduate meeting held last fall in Philadelphia. These talks are always looked forward to with keen interest.

Two case reports followed which were of unusual interest. Dr. William C. Henske, Chippewa Falls, presented a case of gas gangrene with recovery after amputation of the leg and with crepitus over much of the body. He ascribed recovery to frequent large injections of gas gangrene serum and subcutaneous injections of oxygen.

Dr. R. E. Graber of Stanley gave his results in the treatment of three cases of stricture of the oesophagus and of cardiospasm with a dilation method he has used. He uses a pressure up to 350 on the sphygmomanometer scale. These case reports were of unusual interest and will be continued as features in subsequent meetings of the Chippewa Society. M.F.

DODGE

A meeting of the Dodge County Medical Society was held at the Lutheran Deaconess Hospital, Beaver Dam. Dr. Paul A. Teschner of the Wisconsin Anti-Tuberculosis Association, who conducted a clinic during the afternoon, was the speaker of the evening.

LANGLADE

At a meeting of the Langlade County Medical Society in March, the members were addressed by Mrs. L. A. Steffen on the community drive to secure new uniforms for the High School Band. The members generously subscribed to the fund.

At this meeting the Society endorsed the public health program which is being extended to the community this spring It will consist of vaccination for smallpox and the administration of diphtheria antitoxin to school children at such time as would be most beneficial to the children. A committee was appointed to cooperate with a committee of the Parent-Teacher Association. The Committee appointed by the President follows: Dr. M. J. Donohue, Dr. L. A. Steffen, Dr. G. E. Moore, Dr. Wm. Curran, and Dr. C. J. Reznichek.

The Free Chest Clinic under the auspices of the American Legion Auxiliary was also endorsed and a committee consisting of Dr. J. W. Lambert, Dr. E. G. Bloor, Dr. W. F. Dorzeski, Dr. E. A. McKenna and Dr. C. E. Zellmer was appointed to assist the organization.

MILWAUKEE

The April meeting of the Medical Society of Milwaukee County was held at the Milwaukee Athletic Club on Friday, April 12th, at 8:15 P. M. A symposium on scarlet fever constituted the program, the following speakers participating:

Dr. M. J. Fox,—"Diagnostic Points and Hospital Treatment of Scarlet Fever."

Dr. E. F. Peterson,—"Scarlet Fever from the Viewpoint of the General Practitioner."

Dr. M. G. Peterman,—"Scarlet Fever Immunization." The papers were discussed by Drs. John P. Koehler, William Thalhimer, Joseph C. Griffith and L. P. Stamm.

OUTAGAMIE

On Thursday, March 28th, Dr. Louis A. Buie of the Section of Proctology of the Mayo Clinic addressed the members of the Outagamie County Medical Society on "The Diagnosis and Treatment of Anal and Rectal Diseases." Motion pictures were also shown of operations on fistula. The meeting was well attended, some seventy-six physicians being present. G.W.C.

RACINE

The Racine County Medical Society met at the Elks Club on Thursday evening, March 21st, at 8:15 P. M. A very interesting and instructive talk on "The Recognition and Management of Allergic Diseases" was presented by Dr. T. L. Squier of Milwaukee. A general discussion of the subject followed. A short business meeting was then held.

ROCK

The Rock County Medical Society and the Woman's Auxiliary held a joint meeting Tuesday evening, March 26th, at the Hilton Hotel, Beloit.

Following dinner at six-thirty o'clock, Dr. Oliver S. Ormsby of Chicago, clinical professor and chairman of the department of dermatology of the University of Chicago, delivered an address on "Some Mycotic Diseases and Contact Dermatitis."

Dr. R. G. Leland, director of the Bureau of Medical Economics of the American Medical Association, spoke on "Modern Trends in Medical Economics."

SHEBOYGAN

At a meeting of this Society held in Sheboygan on March 26th, Dr. L. M. Warfield of Milwaukee gave an interesting and instructive talk on "That Tired Feeling."

Dr. C. M. Gleason of Manitowoc, newly elected councilor of the fifth district, was present to get acquainted with the members and to speak on timely subjects affecting the medical profession. A.C.R.

WASHINGTON-OZAUKEE

Election of officers of this Society took place on March 28th with the following result: President, Dr. A. H. Barr, Port Washington; Vice President, Dr. A. H. C. Carthaus, Thiensville; Secretary, Dr. R. S. Fisher, Allenton; Delegate, Dr. J. G. Hoffmann, Hartford; Alternate, Dr. H. M. Lynch, West Bend; Censor, Dr. W. J. Wehle, West Bend, reelected to the Board. This meeting was held at Jackson, Wisconsin. After a general business session, lunch and refreshments were served. The social session was arranged by Dr. H. Froede with a round table discussion. R.S.F.

WAUKESHA

The April meeting of the Waukesha County Medical Society was held Wednesday afternoon, April third, at the Avalon Hotel, Waukesha.

The program consisted of a talk and a film demonstrating "The Life History of Cancer" by Dr. J. F. Wilkinson of Oconomowoc.

WINNEBAGO

The March meeting of the Winnebago County Medical Society was addressed by Dr. M. G. Reuter of Milwaukee who spoke on "The Treatment of Social Diseases."

SEVENTH DISTRICT

A meeting of the County Societies in the Seventh District held their eleventh annual meeting at La Crosse on Wednesday, April 24th, at the Stoddard Hotel. Surgical and medical clinics were held during the forenoon at all La Crosse hospitals, followed by luncheon at the hospitals at noon.

The programs at the various hospitals follow:

St. Francis Hospital, Dr. E. H. Townsend, Clinic Chairman:

Surgery of selected cases from eight to nine o'clock.

Food Allergy in Young Infants by Dr. Sylvester Welsh, La Crosse.

X-ray Diagnosis of Small Bowel Obstructions by J. E. McLoone, La Crosse.

Errors in Diagnosis of Acute Abdominal Conditions by Dr. A. A. Skemp.

Care of Severe Diabetes Mellitus in the Young Adult by J. A. Evans and Sr. Hubertine.

Emergency Cases as Checked at the Autopsy Table by the Pathologist by Dr. H. E. Wolf.

Lutheran Hospital in Conjunction with Gundersen Clinic, Dr. Gunnar Gundersen, Chairman.

Surgery by the staff surgeons from eight to ten o'clock.

X-ray Diagnosis of Lesions of the Gastrointestinal Tract with Specimen Removed in Surgery by Dr. P. C. Gatterdam.

Collapse Therapy in Pulmonary Conditions by Dr. Martin Sivertson.

Present Status and Management of Prostatic Obstruction by Dr. Alf H. Gundersen.

Injection Treatment of Hernia with Demonstration of Cases by Dr. John C. Harman.

Grandview Hospital, by Dr. N. P. Anderson, Chairman.

Surgery from eight to ten o'clock.

Postoperative Treatment of Exophthalmic Goitre with Demonstrations of Cases by Dr. W. A. Henke.

Transverse Presentation with Case Reports by Dr. M. W. Mast.

Agranulocytosis, with Special Reference to a Simple Inexpensive Treatment by Dr. N. P. Anderson.

Transverse Myelitis with Demonstration of Cases by Dr. G. Malin.

La Crosse Hospital, Dr. J. E. Heraty, Chairman.

Surgical clinics by Drs. W. J. Jones, J. E. Heraty and R. E. Gray.

Repair of Ventral Hernia.

Arthritis Desiccans of Knee—Removal of Loose Cartilage.

Semilunar Cartilage of Knee. Removal.

The afternoon and evening programs consisted of the following addresses:

An address by Dr. T. J. O'Leary, Superior, President of the State Medical Society.

"So-called Heart Failure in Acute Infections" by Dr. L. M. Warfield, Milwaukee.

"The Importance of Early Diagnosis in the Management of Ureteral Stone" by Dr. F. B. Foley, St. Paul, Minnesota.

"Medico-Legal Angles of Practices" by Dr. A. G. Sullivan, Madison.

The program was completed by an address by Dr. Hugh Cabot, Mayo Clinic, Rochester.

Tomah was selected as the place for the 1936 district meeting.

Officers elected for 1936 are Dr. A. R. Bell, Tomah, President and Dr. T. J. Sheehy, also of Tomah, Secretary.

MILWAUKEE ACADEMY

The Milwaukee Academy of Medicine held a meeting on April 16th. Following presentation of clinical cases, specimens and roentgenograms, Drs. C. H. Tearnan and R. A. Tearnan of Decatur, Illinois, discussed the subject "Hyperparathyroidism."

MILWAUKEE NEURO-PSYCHIATRIC

The April meeting of the Milwaukee Neuro-Psychiatric Society was held on the 25th at the University Club. Speakers and their subjects follow:

"Spongioblastoma of the Basal Ganglion" by Dr. M. G. Masten, Madison.

"Mental Hygiene Aspects of a Neurological Disability" by Dr. G. J. Rich, Milwaukee.

"The Retina in Hypertensive Cardiovascular Disease" by Dr. Mark Nesbit, Madison.

MILWAUKEE OTO-OPHTHALMIC

The April meeting of the Milwaukee Oto-Ophthalmic Society was held at the University Club on the 9th. A clinical meeting with exhibition of patients took place at six o'clock. Following the dinner at six-thirty o'clock, Dr. Winchell Mc K. Craig of the Mayo Clinic spoke on "Problems in Neurosurgery Involving the Ophthalmologist and Otolaryngologist."

MILWAUKEE SOCIETY OF CLINICAL SURGERY

A meeting of this Society was held on Tuesday, April 23rd, at the University Club. The program consisted of the following papers:

"Surgery of the Colon" by Dr. Fred Rankin, Lexington, Ky. Discussion by Dr. Joseph Smith, Wausau.

"The Clinical Aspects of Intussusception" by Dr. Albert Montgomery, associate clinical professor of surgery, Rush Medical College. Discussion by Dr. S. H. Wetzler, Milwaukee.

"Treatment of Burn Scar Deformities" by Dr. G. V. I. Brown, Milwaukee. Discussion by Dr. M. A. McGarty of La Crosse.

THE WOMAN'S AUXILIARY

Mrs. Rock Sleyster, 1220 Dewey Ave., Wauwatosa, *President*
Mrs. F. Gregory Connell, 420 Washington Blvd., Oshkosh, *President-elect*
Mrs. George H. Ewell, 2024 Kendall Ave., Madison, *Secretary*
Mrs. Donne F. Gosin, 631 S. Quincy Ave., Green Bay, *Treasurer*
Mrs. R. W. Tomlinson, 1021 Park Place, Wilmington, Del., *National President*

A Message From Our National President

By MRS. ROBERT W. TOMLINSON
Wilmington, Delaware

IF YOU have read the last copy of the American Medical Association Bulletin you will have learned much of the many pleasurable events that are being planned for our diversion at the time of our annual meeting in Atlantic City in June. We have, this year, an unusual opportunity to be of real help to our men by doing our utmost to make the visit of our Canadian friends a pleasant one.

It is my understanding that this will be the largest medical meeting that the world has known. The Medical Associations of the two largest countries in North America will join together, and ours is the joy that will come in extending our hands and opening our hearts to our northern neighbors. It is my hope that each of us to whom is charged responsibility, will have completed every preparation well ahead of time so that our days may be as unencumbered with unnecessary duties as possible. The program that the Convention Committee is planning for our interest and pleasure is one of great attraction. Never will we be far from the sun, sea air, and the Board Walk. Our meetings, as well as most of our social events, will be within sight of the great Atlantic Ocean.

To each and every member of the Auxiliary I send my hearty thanks and deep appreciation of what your loyalty to your husband's profession has done to arouse enthusiasm for the type of work and pleasure that the Auxiliary may promote.

Will you pass these words along to the wife of every physician, that while the Auxiliary may have the opportunity of making plans for this meeting by the seas, only the co-operation of every Doctor's wife will carry these plans through to a happy fulfillment. We hope that each and every one of them will join with us in our welcome to the Canadian women, and share with us whatever may be of interest and pleasure to them.

DELEGATES TO NATIONAL CONVENTION

Delegates and alternates to the National Auxiliary Convention to be held in Atlantic City, New Jersey, June 10–14, 1935, were elected at the mid-year board meeting of the State Auxiliary.

The 1934 paid membership of the Wisconsin Auxiliary is upwards of 800; therefore Wisconsin is entitled to eight delegates and eight alternates. They are:

Delegates

Mrs. George Ewell, Madison.
Mrs. Harry Heeb, Milwaukee.
Mrs. Irwin Schulz, Wauwatosa.
Mrs. Frank W. Pope, Racine.
Mrs. Earl McGrath, Appleton.
Mrs. Oscar Friske, Beloit.
Mrs. T. J. O'Leary, Superior.
Mrs. Ralph Carter, Green Bay.

Alternates

Mrs. Gregory Connell, Oshkosh.
Mrs. Fred Nause, Jr., Sheboygan.
Mrs. J. Gurney Taylor, Milwaukee.
Miss Hertha Voje, Oconomowoc.
Mrs. Harry Keenan, Stoughton.
Mrs. Arthur J. McCarey, Green Bay.
Mrs. A. J. Wiesender, Berlin.
Mrs. Wm. Donohue, Manitowoc.

The chairman of the nominating committee, Mrs. J. Gurney Taylor, Milwaukee, recommended that in the event either a delegate or alternate named is unable to attend the Convention at Atlantic City, the president of the county auxiliary from which the delegate or alternate is named, be empowered to name some other member of her auxiliary to fill the vacancy. In the event that no member of that respective auxiliary will attend the meeting, the president of the State Auxiliary be allowed to name a member from another county auxiliary.

COUNTY NEWS ITEMS

Douglas County

For the members of the Woman's Auxiliary to the Douglas County Medical Society, who held a meeting at the Androy Hotel, Mrs. H. J. Orchard, Superior, reviewed the book, "Devils, Drugs and Doctors," by Dr. H. W. Haggard, and Mrs. D. R. Searle, Superior, reported on the subscriptions to HYGEIA, a number of which have been contributed to the county schools.

Manitowoc County

The Auxiliary to the Manitowoc County Medical Society recently held a bridge party. There were twenty-five tables from which fourteen dollars were realized. The proceeds will be used to place HYGEIA subscriptions.

Milwaukee County

Due to the fact that much is being said today both for and against "Sickness Insurance", Dr. R. G. Leland, Director, Bureau of Medical Economics of the A. M. A., was invited to speak on this subject at the meeting of the Woman's Auxiliary to the Medical Society of Milwaukee County at their luncheon meeting held at the Y. W. C. A. on Friday, April 12th.

Dr. Leland stressed the fact that the House of Delegates of the A. M. A. is opposed to compulsory sickness insurance, and believes that no political influence should be allowed to tamper with the relationship between doctor and patient.

Dr. Carl Henry Davis of Milwaukee gave a most interesting illustrated travel talk on his trip last summer through Norway, Sweden and Russia. A group of Russian and Norwegian songs were presented by Mrs. Rudolph Teschan who has won acclaim in musical circles.

Mrs. Eben J. Carey, program chairman, announced that the speaker for the May meeting would be Miss Amy Zillmer of the State Board of Health, her subject being "The Adolescent Girl and Her Problems".

The HYGEIA committee reported the White Elephant sale held March 14th a great success. Five hundred and twenty dollars was cleared and as a result *five hundred and fifty-five subscriptions to Hygeia have been placed in Milwaukee County.*

At a benefit bridge party sponsored by the Flower and Courtesy Committee the sum of forty-five dollars was realized.

The second annual dinner dance of the Medical Society and the Woman's Auxiliary will be held May 15th at the Schroeder Hotel.

Portage County

"While anti-vivisectionists are fighting scientific medical experimentation upon animals, nothing is being done to prevent the exploitation of millions of people in the United States, who are being experimented upon daily by unscrupulous and mercenary business firms," declared Dr. Harry E. Kasten of Beloit, who addressed a guest program of the Woman's Auxiliary to the Portage County Medical Society, held on April 8th at the home of Mrs. Erich Wisiol, Stevens Point, on the subject "Human Guinea Pigs". Mrs. Austin G. Dunn was assisting hostess, and special guests for the occasion were wives of Stevens Point attorneys.

Dr. Kasten was introduced by Mrs. Wayne F. Cowan, president of the Auxiliary. She explained the scope and purpose of the auxiliary to the guests and stated one of its chief projects was the introduction of the magazine, HYGEIA, into schools.

Mrs. Harry E. Kasten, Beloit, a member of the Rock County Auxiliary, was also a guest for the afternoon.

Racine County

At the April meeting of the Woman's Auxiliary to the Racine County Medical Society, Dr. John Docter gave an interesting talk on "Adolescence". Mrs. E. C. Pfeifer read several articles from the pamphlet on "Sickness Insurance and the Propagandist Foundations" by George Crownhart, Secretary of the State Medical Society.

Sheboygan County

Members of the Auxiliary to the Sheboygan County Medical Society attended a luncheon at the Sheboygan Vocational School on April 3rd, after which they visited the various departments. The itinerary through the building included the nursery school, the commercial school, the construction works in the shops for boys, the school for crippled children and the vocational department for girls. As a result of this visit the orthopedic school was the recipient of a much needed piece of equipment, this being a foot tub presented by the Auxiliary as a demonstration of their great interest in the school.

Waukesha County

The April meeting of the Auxiliary to the Waukesha County Medical Society was held on April 3rd at the home of Mrs. J. C. Frick, Waukesha, the speaker of the occasion being Miss Caroline Herrl, superintendent of nurses at the Waukesha Municipal Hospital, who gave a most interesting talk entitled "Hospital Facts".

Reports on articles from HYGEIA, the Wisconsin Medical Journal and the Journal of the American Medical Association were read by Mesdames Tibbits, Oatway, and Davies.

Dr. W. W. Bauer, director of the Bureau of Health and Public Instruction of the American Medical Association, spoke on "Health Education versus Health Racketeering" at an open meeting on the evening of April 29th at the Waukesha High School auditorium.

Winnebago County

A luncheon meeting of the Auxiliary to the Winnebago County Medical Society was held March 25th at Hotel Menasha, Menasha. At the business meeting following the luncheon, plans were made for a benefit bridge party to be given to defray expenses for the educational program sponsored by the Auxiliary.

Three minute talks were given by Mrs. William A. Wagner, Oshkosh, who presented an editorial concerning the Wagner bill; Mrs. L. P. Allen, Oshkosh, who read an article from HYGEIA, and Mrs. Leonard Smith, Oshkosh, who read the report of the Milwaukee Auxiliary.

Mrs. Gregory Connell, Oshkosh, president-elect of the State Auxiliary, read a letter from the national president.

YOUR DUES ARE DUE

Those counties who have not paid state and national dues for 1935 should do so *now*. State and national dues of fifty cents for each member together with the pink and blue receipt slips should be sent to the State Medical Society office, 119 E. Washington Ave., Madison, Wis.

The State Treasurer, Mrs. Donne F. Gosin, and the Executive Secretary, will appreciate your immediate cooperation.

News Items and Personals

Dr. M. P. Andrews of Manitowoc was elected a member of the Board of Education of Manitowoc at the recent spring election.

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Dr. Eleänore Cushing-Lippitt was elected to the presidency of the George Washington University Alumni Club of Milwaukee at the recent meeting of that organization.

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Drs. F. W. Madison and Theodore L. Squier of Milwaukee were among the twenty-five American physicians named by "Modern Medicine" as having contributed most to medical science during the year 1934.

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Dr. William J. Carson of Milwaukee was elected Secretary of the Wisconsin Executive Committee of the American College of Surgeons at the North Central Section meeting of the organization in St. Paul.

Dr. F. Gregory Connell of Oshkosh was elected Chairman of the Wisconsin Committee and Dr. T. J. O'Leary, President of the State Medical Society, was named Councilor.

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Dr. S. G. Schwarz, a member of the Marshfield Clinic staff for the past ten years, retired from his profession on April first. He and his family will return to their country estate near Humbird, Wisconsin, where Dr. Schwarz had previously practiced before going to Marshfield.

Members of the Clinic and their wives were hosts at a dinner in his honor, and as a remembrance of his years of service in Marshfield, Dr. and Mrs. Schwarz were presented with a traveling bag.

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Dr. J. M. Sullivan of Prairie du Chien in April announced the removal of his clinic to a new location in the city of Prairie du Chien and the changing of the name of his clinic from Good Health Clinic to the Beaumont Hospital.

About two hundred physicians attended the session of the course in laboratory methods and clinical interpretations which was held on March 21st under the auspices of the Medical Society of Milwaukee County. Dr. Russell L. Haden of the Cleveland Clinic spoke on "Recent Advances in Hematology." The following members of the Milwaukee Pathological Society are instructors in this course: E. F. Barta, Norbert Enzer, John Grill, M. Fernan-Nunez, H. A. Heise, Armand J. Quick and E. L. Tharinger.

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Dr. Hans H. Reese, Madison, editor of the Neurological Year Book in the Practical Medicine Series, is attending the International Dermatological and Syphilological Congress at Budapest to report on the results of tryparsamide in neurosyphilis based on the experience of the Wisconsin Psychiatric Institute.

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Dr. L. E. Dickelmann of Oshkosh was elected president and Dr. R. T. McCarty of Appleton was named secretary and treasurer of the newly organized Marquette Medical Alumni of the Fox River Valley at a meeting held in Appleton recently.

A clinical pathological conference was conducted by Drs. F. D. Murphy and John Grill of Milwaukee.

After forming a permanent organization, the group voted to hold postgraduate conferences twice a year,—the next one to be held in Wauwatosa in June.

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Dr. J. M. Dodd, Sr., Ashland, was re-elected mayor of Ashland by an almost majority vote over four opponents in the spring election. This is Dr. Dodd's third term as mayor.

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Dr. and Mrs. H. G. B. Nixon of Hartland returned the middle of April from a two months' trip to Mexico and southern Texas.

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The annual meeting of the American Association for the Study of Goiter will be held in Salt Lake City, Utah, June 24th, 25th, and 26th. A program of the meeting may be obtained by addressing Dr. W. Blair Mosser, Corresponding Secretary, Kane, Pennsylvania.

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Drs. H. A. and J. C. Devine, who for several years have had offices on the third floor of the Hutter building in Fond du Lac have moved into larger quarters on the fifth floor of the building. The suite consists of a waiting room, an inner office, consultation rooms, operating room for minor operations, and fluoroscopic and x-ray rooms.

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Dr. and Mrs. R. L. MacCornack, Whitehall, attended the National Red Cross Convention held at Washington, D. C., April 8th to 11th. The trip was by auto and included visits to many places of historic interest. At Washington they attended a reception at the White House extended to the Red Cross delegates.

RADIO PROGRAM

Health talks are broadcast over the Wisconsin State-Owned Stations by the State Medical Society of Wisconsin each Tuesday, Wednesday and Thursday at 10:45 A. M. These programs on health are presented at Radio Hall, the broadcasting studio located on the campus of the University of Wisconsin. Tune in near the middle of the dial! Many WHA programs, including health talks, are broadcast simultaneously by WLBL, Stevens Point. This station too, is state-owned.

The schedule follows:

May 14, 1935.	Home is not "Haven of Security".
May 15, 1935.	Household Sanitation.
May 16, 1935.	Spring Exercise.
May 21, 1935.	The Medicine Chest.
May 22, 1935.	Your Child's Teeth.
May 23, 1935.	The Little Vacation Around the Corner.
May 28, 1935.	A Queen's Battle with Cancer.
May 29, 1935.	Hobbies and Health.
May 30, 1935.	The Job of Being a Parent.
June 4, 1935.	The Best is Yours.
June 5, 1935.	Intelligent First Aid.
June 6, 1935.	First Aid to Medical Terms.

Dr. Arthur C. Taylor, assistant to Dr. E. R. Schmidt at Wisconsin General Hospital, Madison, has taken over the practice of the late Dr. A. A. Axley, Washburn. He will also manage the Washburn Hospital.

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Dr. D. E. W. Wenstrand, Milwaukee, and his son Eric returned in April from a four weeks automobile trip to the southeastern states.

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A cordial invitation is extended to all who are interested to attend the annual meeting of the American Neisserian Medical Society to be held on June 11, 1935, at the Claridge Hotel, Atlantic City, New Jersey. Programs may be obtained from Dr. Oscar F. Cox, Secretary, 475 Commonwealth Ave., Boston, Mass.

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A new medical organization to be known as the Mississippi Valley Medical Society was formally organized at Quincy, Illinois, on April 8th. The sole purpose of the new society is to hold an annual meeting each fall devoted to intensive postgraduate instruction and conducted by the leading clinical teachers of the United States.

The first meeting will be held in Quincy during the month of October or November and will be a three-day session. Physicians interested in the new organization are urged to communicate with Dr. Harold Swanberg, Secretary, 211 W. C. U. Bldg., Quincy, Ill.

BIRTHS

A daughter, Dianne Rae, to Dr. and Mrs. R. S. Fisher of Allenton on March third.

A son, John Raymond, to Dr. and Mrs. Raymond J. Rogers, Oconto, on April second.

MARRIAGES

Dr. E. A. Brzezinski, Milwaukee, to Miss Faith M. Downey, Milwaukee, on February 21st.

DEATHTS

Dr. A. A. Axley, Washburn, died at a Washburn hospital on April 16th.

Dr. Axley was born in the year 1887 and was a graduate of Rush Medical College in 1912. Following the World War, Dr. Axley came to Washburn to take over the practice of Dr. P. G. Frey. He had practiced at Washburn since that time.

Dr. Axley was a member of the Ashland–Bayfield–Iron County Medical Society, the State Medical Society, and the American Medical Association. He was also chief-of-staff of Washburn Hospital.

Survivors are his widow and two sons, John, a premedical student at the University of Wisconsin, and Bert, a senior in Washburn High School.

Dr. A. D. Brown, Mineral Point, died on April 12th at a hospital in Dodgeville.

Dr. Brown was born October 7, 1858, at Henderson, Ill. He was a graduate of Rush Medical College in the year 1883. He began his practice in Pierre, South Dakota, remaining there until 1894 when he moved to South Wayne, Wisconsin. In 1909 he moved from there to Mineral Point.

He is survived by his widow and one daughter.

Dr. H. A. Buell, Prairie Farm, died of heart disease on March 20th.

He was born in the year 1885 and was a graduate of Wisconsin College of Physicians and Surgeons in 1910. He was a veteran of the World War.

He is survived by his widow.

Dr. John E. Guy, Milwaukee, died on April 10th of heart disease at his home, 2565 N. Maryland Avenue.

Dr. Guy was born in the year 1879 and was a graduate of Hahnemann Medical College and Hospital, Chicago, in 1904. He practiced for several years in Woodstock, Illinois, before coming to Milwaukee. Specializing in diseases of the eye, ear, nose and throat, Dr. Guy had been in practice in Milwaukee for twenty-one years.

Dr. Guy was a member and former president of the State Board of Medical Examiners, being reappointed in 1932 by Governor Philip F. La Follette.

He was also a member of the staff of St. Mary's Hospital and formerly of the County General Hospital.

He was a member of the Medical Society of Milwaukee County, the State Medical Society, and the American Medical Association.

Surviving are his widow and four sons, Curtis F., of Milwaukee; Dr. Emmett F. of Oostburg; John Robert of New York, and Harold E., now a student at the University of Michigan.

RESOLUTION OF STATE BOARD OF MEDICAL EXAMINERS

WHEREAS, It has pleased Divine Providence to call from his earthly duties our friend and fellow member, Dr. John E. Guy, and

WHEREAS, Dr. John E. Guy has, during his eight years of service as a member and officer of our board, been a most able and efficient worker, and

WHEREAS, His fearless and unrelenting devotion for the advancement of medical ethics, his fair and impartial attitude on medical licensure, his mature judgment and splendid spirit of cooperation on all matters of medical legislation, has exemplified most clearly the trust and confidence which the state and medical profession has had in his integrity and ability,

Therefore, be it resolved, That we express to his wife and family our most profound sympathy and direct a copy of this resolution be forwarded to the State Medical Society, the State Homeopathic Society, and a copy spread upon the minutes of our Board.

Respectfully submitted,

WISCONSIN STATE BOARD OF MEDICAL EXAMINERS,
Henry J. Gramling, M.D.
President,
E. C. Murphy, D.O.,
A. G. Koehler, M.D.,
Charles W. Giesen, M.D.
John R. Venning, M.D.
Bart E. McGonigle, M.D.
Robert E. Flynn, M.D.,
Secretary.

Dr. William M. Urkart, West Bend, died on April 7th at a Madison hospital.

He was born in the year 1878 and was a graduate of the Milwaukee Medical College in 1907. For many years he conducted the West Bend Sanitarium at West Bend, Wis.

He is survived by his widow and one daughter.

SOCIETY RECORDS

New Members

C. F. Cronk, Cameron.

Richard S. Rodgers, Chippewa Falls.

Willard G. Huibregtse, Sheboygan Clinic, Sheboygan.

T. P. Keenan, Lake Geneva.

Kenneth B. McDonough, 1320 Spring St., Madison.

A. T. Hume, Chetek.

L. C. Dietsch, Plymouth.

E. G. Barnet, Wisconsin Rapids.
H. L. Schwartz, 625—57th St., Kenosha.
John V. Flannery, Hiles.
E. J. O'Neill, 2906 W. Forest Home Ave., Milwaukee.
Theodore Rosen, 744 W. North Ave., Milwaukee.
James R. Regan, Veterans Administration Hospital, Veterans Administration.
Carl G. Dunst, 1445 N. Cass St., Milwaukee.
W. E. Clark, Oshkosh.
M. J. Donkle, Oshkosh.
Richard W. A. Dehmel, Germantown.
Carl E. Bellehumeur, 716 N. 11th St., Milwaukee.
H. B. Sadoff, 606 W. Wisconsin Ave., Milwaukee.
Earl V. Hicks, New Glarus.
E. Charbonneau, 1112 Tower Ave., Superior.
M. W. Garry, Sherwood.
Marvin S. Averbook, 1304 Tower Ave., Superior.

Change of Address

V. A. Chapman from 313 E. Wisconsin Ave., to 324 E. Wisconsin Ave., Milwaukee, Wis.

MEDICAL ECONOMICS

TRUTH—STRANGER THAN FICTION

This month a true story came to us of the sad plight in which a physician's widow found herself. If we had not heard her legal counsel tell this story, we might have doubted its accuracy. The physician died suddenly. His widow went to his attorney to determine her financial position. She found practically no records and what records she did find were in such a confused state as to be largely without legal position in any effort to secure collections. She found a small checking account at the local bank.

She knew her husband owned certain pieces of property and in a vague way she realized that he had other financial interests. Where were the records? The bank advised her that the checking account was the only record they had of her husband's business transactions. The physician had no safety deposit box in the bank and had never left any securities with them for safe-holding. As a matter of fact, the widow could not even find the deed to the house they lived in.

The medical profession knows better than any other one group that life has its uncertainties. Yet this physician, probably without thinking about it, gambled and his widow is the loser. No one thinking about it would want to leave his family in quandary because of lack of records, but such neglect as this cited may bring just that about.

ANOTHER SPRING CAMPAIGN

One of the physician's tokens of spring is the increased solicitation from collection agencies. We have said much about these agencies in previous issues but we cannot refrain from quoting here a news item from the Chicago Tribune. It is reprinted verbatim with the omission of the name of the company:

"Sample of Own Medicine Given to Collectors
(Chicago Tribune Press Service)

"Washington, D. C., April 4, 1935 (Special)
"A Chicago collection agency today got a dose of its own medicine when the United States Board of Tax Appeals ordered it to pay $6,232 in income taxes pending since 1927.

"The Company lost its suit against the treasury department which had levied the additional tax. The company can appeal the board's decision to the federal courts.

"The fact that the company keeps 84 to 87 percent of all the debts it collects and returns to the creditor clients only 16 to 13 per cent came out during the arguments of the case. In 1925, the most profitable year reported, the company collected $348,388, kept $285,728, and returned $62,660 to the creditors."

Your Society has information on the contracts of many collection agencies. Do not hesitate to use your membership to make inquiry before you sign.

CASH RELIEF—MEDICAL CARE

In recent weeks considerable has been said in the press quoting state and local relief officials with reference to the desirability of substituting cash relief for commodity relief. One of our members has raised the very thoughtful question whether such a system as is seemingly contemplated would substitute the requirement that the individual provide out of his cash allotment his own medical service, as a substitute for the present method of handling medical relief in those counties and districts where relief is handled under the Federal system with free choice of physician for home and office essential services.

Your Secretary has discussed the question with state relief officials and we are informed that the contemplated substitution of cash relief, in those counties where it is approved by the local officials, would be essentially the furnishing of cash for such commodities as groceries. In event that cash relief is substituted for commodity relief, we are informed that the present F.E.R.A. system of handling medical relief would be undisturbed.

Cash relief should not be confused with work relief. Work relief projects will become effective shortly after the first of July. Cash relief is but a means of handling the client who is still on the relief rolls.

HOW THEY WORK

A collection agency representative called at the office of the State Society in April to ask for ap-

proval of the Society. After submitting all the material they also stated that they would like to take a half-page advertising space in the Journal.

Before the investigation was completed, the State Society office was called by members who stated that representatives of the Company were in the field asserting that approval of the State Society would be forthcoming in a day or two.

The Company was not approved.

DISCUSSION OUTLINE

In the February issue of "Industrial Medicine" an editorial writer said in part: "It will do no good for the doctors to tell each other what they think about the lay efforts towards health insurance * * *. The doctor must come forward.

"He must tell the lay public what he, the doctor, wants and must have; that lay plans are not right and why they are not right."

To help our members present the general subject of social medicine and sickness insurance, your Society has prepared a mimeographed outline of notes which may either be materially "cut" or elaborated upon in presenting this subject to lay discussional groups. The outline has been prepared for the use of the physician only for the reason that the material is suggestive and it of necessity requires a physician's background in its amplification and explanation.

SICKNESS INSURANCE AND CULTS

Proponents of compulsory sickness insurance never fail to remind us how their legislative enactments would improve the quality of medical service.

We are reminded, however, that the Legislature that would establish sickness insurance is not a different body from that which, on occasion, has adanced various cult measures. The *Milwaukee Leader* (July 24, 1934) in commenting editorially on sickness insurance said, "Of course, socialized healing will have to be so arranged that the patients can have the services of whatever school of healing they desire."

YOUR INSURANCE

Our members are warned that their malpractice insurance policies provide that they shall report threats of malpractice actions promptly. If they wait several months until the suit itself is commenced, and yet know that a suit is in the "offing," that itself is cause for invalidating policies. Whether you have Society Defense or insurance policies, report promptly upon the first suspicion that any patient is dissatisfied to the point of considering resort to civil action.

EMPLOYING THE EMPLOYABLE

Under the President's Work Relief Program we are told that beginning July 1st every effort will be made to "employ the employable." We learn that according to the latest estimate from Washington some 34% of those on Wisconsin's relief rolls are considered to be employable. With their dependents who would be removed when employment was furnished the wage-earner, it has been variously estimated that from 70% to 85% of the people now on relief will be placed on a self-sustaining basis as the ultimate result of the project. We learn, however, that it is probable that the new employment projects may not develop as fast as some newspaper accounts would lead us to believe. It will probably be well into the summer, if not early fall, before any large percentage are taken from the relief rolls.

REINSTATE C. W. A.?

Our advices from Washington seemingly indicate that those given work under the new employment projects will again be placed under the U. S. Employees Compensation Bureau for a limited form of compensation insurance similar to that granted under the Civil Works Administration a year ago. Representatives of the American Medical Association and your Society are in contact with Washington officials in an effort to secure a procedure for medical service that will permit both of free choice of physician and avoid the payment difficulties universally encountered by our members in securing compensation, even at reduced rates, for authorized services rendered under the old C. W. A.

LIVER EXTRACT FOR RELIEF PATIENTS

The Federal Emergency Relief Administration in cooperation with the manufacturers have released a bulletin advising State Relief Administrators that Liver Extract can be secured from the manufacturers at a marked discount. The liver extract is to be used under a physician's direction and is to be secured by the county relief administrators through the State Emergency Relief office.

The following companies through their branches have agreed to furnish the government with liver extract:

Squibb, Parke Davis & Company, Abbott Laboratories, Wilson Laboratories, Chappel, Armour & Company and Valentine's Meat Juice Company.

Your county relief administrator can secure furtheir details on the specifications for ordering the liver extract. The extract cannot be purchased through wholesalers, jobbers or local druggists, but must be secured direct from the manufacturers.

BUT NOT SAUCE FOR—

Physicians who have watched with interest the propagandist efforts of Mr. Filene's Twentieth Century Fund to bring about the socialization of medicine were interested in announcements in "News Week" and "Time" carried in the April 27th issues. In both magazines reference was made to a statement by Louis E. Kirstein, Vice President of Mr. Filene's Boston department store.

Announcing formation of the American Retail Federation to serve as "the unified voice" on national legislation and economic problems, Mr. Kirstein is reported to have said:

"Everybody went down to Washington and began writing codes for retailers to observe. There was no single authoritative group to speak for retailers generally, and they were outshouted in the proceedings which followed.

"We merchants, dealing directly with more than 100,000,000 customers, would like to be consulted about . . . problems of vital importance to retailers and the consuming public."

EPSTEIN APPROVES OSTEOPATHS

That Mr. Abraham Epstein, Secretary of the American Association for Social Security, will amend the Association's bill in the New York legislature to provide for osteopathic service in order to secure support of osteopathic organizations, was the announcement in the Journal of the American Osteopathic Association. In the March issue of the Journal of the American Osteopathic Association, referring to the Epstein bill as introduced in New York, it is stated, "it was drawn in accordance with Mr. Epstein's agreement that when submitted to the states it would not contain the term 'general medical practitioner' but words that would more specifically protect the rights of the patients of osteopathic physicians."

Will Mr. Epstein explain his agreement?

Debate "Socialized Medicine" In Wisconsin High Schools Next Fall

HIGH school teams throughout Wisconsin next fall and winter will debate the question:

"Resolved: That the several states should enact legislation providing for a system of complete medical service available to all citizens at public expense."

This was the decision of the National University Extension Association Debate League, of which Wisconsin is a member, according to an announcement just made to the press by Bower Aly, instructor in English at the University of Missouri and Chairman of the Committee on the selection and wording of the question.

The official announcement follows:

The question for the National University Extension Association debate league for next year has been selected, according to an announcement made this week by Bower Aly, instructor in English at the University of Missouri and Chairman of the Committee on the selection and wording of the question. The question for high school debates next year is: "Resolved: That the several states should enact legislation providing for a system of complete medical service available to all citizens at public expense."

This question will be debated by over 100,000 high school and college teams next year in every state in the Union. The debates will not only deal with the question as stated but with all phases and aspects of socialized medicine, according to Mr. Aly.

The official handbook for the debate league will be edited again this year for the third successive year by Mr. Aly. This handbook will serve as an index to reference material on both sides of the question and several groups including the American Medical Association, the 20th Century Foundation and the Rosenwald Foundation are cooperating with Mr. Aly in securing reference material for the handbook.

The national committee which selected and worded the question under Mr. Aly's chairmanship included J. H. McBurney of the University of Michigan, H. B. Summers, Kansas State College, Brook Quimby of Bates College, and E. C. Buehler of Kansas University.

Section on Radiology Meets at Milwaukee May 17, 18; Members Invited

ALL members in good standing of the State Medical Society of Wisconsin are invited to attend the midyear meeting of the Section on Radiology. Sessions will be held beginning at 1:00 P. M. on Friday, May 17th, and Saturday morning, May 18th, beginning at 8:30 A. M. The program follows:

FRIDAY, MAY 17TH—1:00 P. M.

1:00. "Accessory Nasal Sinuses, Diagnosis and Treatment from 1920 to 1935"—Wm. Fletcher, M. D., Salem.

1:20. "Skull Fracture Symposium"—L. V. Littig, M. D., Madison; R. L. Troup, M. D., Green Bay; J. Supernaw, M. D., Mad-

ison. Discussion on Skull Fractures to be opened by Ralph Carter, M. D., Green Bay.

2:10. "The Localization of Pleural Effusions"—S. A. Morton, M. D., Milwaukee.

2:35. "Roentgen Treatment of Septic Parotitis"—H. W. Hefke, M. D., Milwaukee.

2:55. "Roentgen Observations on the Normal and Pathological Interlobar Pleura"—L. G. Rigler, M. D., University of Minnesota, Minneapolis.

3:30. "The Well Leg Splint in Fractures at the Hip"—R. P. Potter, M. D., Marshfield.

3:50. "Roentgen Therapy of Leukemia"—E. A. Pohle, M. D., Madison.

4:10. "Plea for Better Roentgenograms on Intracapsular Fractures Involving the Hip"—J. W. Powers, M. D., Milwaukee.

7:00. *Dinner—Schroeder Hotel.*

8:00. "Economics"—E. L. Jenkinson, M. D., St. Luke's Hospital, Chicago.

8:15. "Roentgen Study of Leukemia of the Stomach and its Relationship to Chronic Hypertrophic Gastritis"—L. G. Rigler, M. D.

SATURDAY, MAY 18TH—8:30 A. M.

1. Business Meeting.
2. Round Table Discussion—Chairman, J. E. Habbe, M. D.

9:00. "Congenital Atresia of the Esophagus"—I. G. Ellis, M. D., Madison.

9:10. "Gastric Syphilis"—L. G. Glickman, M. D., Veterans' Administration, Milwaukee.

9:20. "Carcinoma of the Pancreas"—I. E. Bowing, M. D., Kenosha.

9:30. "Megacolon of the Sigmoid"—L. V. Littig, M. D., Madison.

9:40. "Dermoid Cyst in the Pelvis"—A. M. Dorr, M. D., Milwaukee.

9:50. "Fetal Bone Malformation"—Theo. Sokow, M. D., Kenosha.

10:00. "Multiple Myeloma"—F. H. Kuegle, M. D., Janesville.

10:10. "Erosive Intracranial Tumor" (Aneurysm)—R. P. Potter, M. D., Marshfield.

10:20. "March Foot"—F. W, Mackoy, M. D., Milwaukee.

10:30. "Infected Sphenoid Sinus"—W. T. Fletcher, M. D., Salem.

10:40. "A Case of Pulmonary Tuberculosis with Unusual Features"—H. M. Coon, M. D., Stevens Point.

10:50. "Atelectatic Pneumonia of Right Lung Simulating Foreign Body"—J. A. Evans, M. D., La Crosse.

11:00 "Right-sided Retro-esophageal Aorta with Mediastinal Symptoms"—J. E. Habbe, M. D., Milwaukee.

11:10. "Toxic Thyroid Treated by Radiation"—F. C. Christiansen, M. D., Racine.

11:20. "Experiences in Deep Therapy"—C. A. H. Fortier, M. D., Milwaukee.

Chiropractors Win Assembly Battle to Extend Privileges; Senate to Decide

THE Wisconsin Senate will cast the deciding vote during May and early June whether chiropractors in this state are to have a material extension of their present license rights.

This was forecast on Monday, April 29th, when the Assembly by votes of 57 to 28 and 55 to 26 respectively refused to kill and then advanced bills 403, A., and 517, A., granting chiropractors the right to treat injuries under the Compensation Act under certain conditions, and to advertise themselves as "Doctor of Chiropractic". In advancing this chiropractic legislation, the Assembly indicated that it would undoubtedly also advance, later during May, a third chiropractic bill to take the licensing of new chiropractors out from under the jurisdiction of the Wisconsin Basic Science Board.

The bill to grant chiropractors the right to use the title "Doctor of Chiropractic" or the initials "D. C." was advocated by Assemblyman Blomquist of Adams, sponsor of the legislation for the Wisconsin Chiropractic Association. He declared that the law was inconsistent in that chiropractors were licensed but were not permitted to use "the title which they have earned".

"It is not fair to freeze out these men," said Mr. Blomquist. "I hope that you give them the right to use their diploma that they have so rightly earned. There is room for every healing art and every healing profession."

Declaring that even men in the United States Forest Products Laboratory use the title "Dr.", Assemblyman Kostuck of Stevens Point, supported Assemblyman Blomquist.

"If those men can use the title of 'Dr.'," said Mr. Kostuck, "I think that the chiropractors should have the right to use it."

"I want to find out when the M. Ds. got the monopoly on the word 'Dr.' ", declared Assemblyman Marius Dueholm of Polk County, Chairman of the Assembly Committee on Public Welfare. "I have heard of malpractice cases, many of them, where the M. Ds. are concerned. But I have never heard of a malpractice case in regard to a chiropractor nor have I ever heard of a chiropractor going to Waupun, but I have heard of M. Ds. going there. I don't think the doctors have a monopoly on the title. I have always been in favor of the under dog."

Assemblyman J. C. Hanson of the second district of Dane County also led the fight for the chiropractors on this bill.

OPPOSE EXTENSION

The opposition to the chiropractic title "Dr." bill was led by Assemblyman Joseph L. Barber, M. D., Marathon; Maurice Fitzsimons, Jr., of Fond du Lac; Albert D. Shimek, Algoma; Vernon Thomson, Richland Center, and R. W. Peterson of Berlin.

"Prior to 1925," declared Assemblyman Thomson, in opposing the bill, "chiropractors could practice without a license. In those days they went away to school for from three to six months and came back a full chiropractor. About six hundred such chiropractors were admitted to the state by the way of the grandfather clause under which they were granted their license as 'prior practitioners'.

"Ninety-eight percent of the present chiropractors in Wisconsin entered the state in this way. Their training is not sufficient.

"This title of 'Dr.' has been used for years and years and years and it carries with it the connotation of one who has had long years of training and postgraduate education in the field of caring for the sick. I hope this bill will be defeated."

Assemblyman Joseph Barber declared that the bill was merely one to permit them to "imitate" the general practitioner of medicine.

Assemblyman Maurice Fitzsimons, Fond du Lac, moved the killing of the measure and pointed out that no recognized universities or colleges taught the principles of chiropractic.

"This is a dangerous piece of legislation," said Mr. Fitzsimons. "Think of the strangers that come into the towns and see the sign of 'Dr.',—those strangers think they are going to a regular physician,—an M. D. Then, under this bill, these people are on the rubbing board getting punched before they know it."

ROLL CALL

On the question of killing the bill, twenty-six favored the motion and fifty-five voted not to kill the measure, which was then advanced.

Those voting to kill the bill were: Barber, Bichler, Caffrey, Daugs, Fitzsimons, Foley, Grimes, Hall, E. D., Howard, Kelly, Kronschnabl, Krueger, Laack, Meisner, Murray, Nehs, Novotny, Olson, Peterson R. W., Shimek, Short, Swanson, Thomson, Vaughan, Weissleder and Young—26.

Those voting to give chiropractors the right to use the title "Doctor of Chiropractic" were: Alfonsi, Barnes, Bay, Beggs, Bergren, Blomquist, Brandt, Busby, Cavanaugh, Goldthorpe, Dueholm, Franzkowiak, Fuhrman, Graass, Grobschmidt, Grosvenor, Groves, Halvorsen, Handrich, Hanson, Harper, Hemmy, Hipke, Hitt, Hoesly, Jackson, Johnson, Kaiser, Kiefer, Koegel, Kostuck, Kretlow, Laabs, Ludvigsen, Lynch, Michalski, Millar, Nelson, O'Malley, Peterson E. C., Poltl, Pritchard, Robinson, Ryan, Schenk, Schilling, Sibbald, Siebert, Staudenmaier, Stone, Sweeney, Theisen, Trego, Wegner and Mr. Speaker—55.

Absent or not voting: Baker, Douglass, Garvens, Genzmer, Grassman, Hall M. H., Hamata, Inman, Kroenke, Kryszak, La Bar, Lomsdahl, Mulder, Peterson T. A., Rakow, Sieb, Sigman, Vogel and Woerth—19.

COMPENSATION ACT BILL

On the same evening, by a vote of 28–57, the Assembly refused to kill Bill 403, A., which would grant chiropractors the right to treat injuries under the Compensation Act so long as the employer did not file objection to

the treatment with the Industrial Commission prior to selection by the employee.

Assemblyman Grobschmidt, Milwaukee; Robert Lynch, Green Bay; and Kiefer, Milwaukee, led the chiropractic fight for the bill. Opposition to the bill was again voiced by Assemblyman Vernon Thomson, Richland Center; Maurice Fitzsimons, Jr., of Fond du Lac; Ray Novotny, Oshkosh; and Clarence Olson, of Ashland.

Pointing out that under the phraseology of the bill an injured employee who elected chiropractic treatment, when he should have had surgery, would lose all rights under the Compensation Act, Assemblyman Thomson of Richland Center declared, "This bill would place the burden of proof on the injured man and is contrary to the basic principles and conception of a Workmen's Compensation Act designed to protect labor."

Assemblyman Grobschmidt of Milwaukee, sponsor of the bill, claimed that Assemblyman Thomson was in error and that this was not the same bill as vetoed by Governor La Follette four years ago.

Asserting that chiropractic treatment was now denied injured workmen, Assemblyman Robert Lynch, Green Bay, continued the fight on the floor to secure passage of this chiropractic bill.

"This bill," said Mr. Lynch, "would shift the burden from the working man. If he calls a chiropractor now he does not get the benefits of the Compensation Act. This bill would allow him to get the benefits if he notifies the Industrial Commission. And the employer has the right to notify the Industrial Commission that he will not pay the chiropractor."

"I hope we haven't reached the time yet when we are going to build a fence around the school of medicine," said Assemblyman Kiefer of Milwaukee, supporting the measure. "The American Medical Association, at the time the Compensation Act was passed, made it necessary for the Christian Science people to come to Madison by the trainload to allow them their privileges under the Compensation Law. I hope that the bill is not indefinitely postponed."

Assemblyman Ray Novotny, Oshkosh, voiced his alarm of what was happening to the public welfare in the face of Assembly action " to pass bills like this."

"We are derelict in our duty," said Mr. Novotny, "if we keep on passing these bills. The injured man is entitled to the best care possible. The Legislature owes it to the injured man to protect him. Chiropractors cannot sign death certificates,—and I would like to ask you who would sign the death certificate if an employee died in the hands of a chiropractor?"

Assemblyman Novotny's position was supported by Assemblyman Clarence Olson, Ashland, Chairman of the Judiciary Committee of the Assembly. Mr. Fitzsimons of Fond du Lac moved that the bill be killed and asked for a roll call.

THE ROLL CALL

Those voting to kill the chiropractic bill were: Barber, Barnes, Bichler, Cavanaugh, Daugs, Fitzsimons, Foley, Genzmer, Grimes, Hamata, Hipke, Howard, Kretlow, Kroenke, Kronschnabl, Krueger, Laack, Meisner, Mulder, Murray, Novotny, Olson, Peterson R. W., Shimek, Short, Thomson, Weissleder and Young—28.

Those voting for the chiropractors were: Alfonsi, Bay, Beggs, Bergen, Blomquist, Brandt, Busby, Caffrey, Goldthorpe, Dueholm, Franzkowiak, Fuhrman, Graass, Grobschmidt, Grosvenor, Groves, Hall, E. D., Halversen, Handrick, Hanson, Harper, Hemmy, Hitt, Hoesly, Jackson, Johnson, Kaiser, Kelly, Kiefer, Koegel, Kostuck, Laabs, Lomsdahl, Ludvigsen, Lynch, Michalski, Millar, Nehs, O'Malley, Peterson, E. C., Poltl, Pritchard, Robinson, Ryan, Schilling, Sibbald, Siebert, Sigman, Staudenmaier, Stone, Swanson, Sweeney, Thiesen, Trego, Vaughan, Wegner and Mr. Speaker (Carow)—57.

Absent or not voting: Baker, Douglass, Garvens, Grassman, Hall, M. H., Inman, Kryszak, La Bar, Nelson, Peterson, T. A., Rakow, Schenk, Sieb, Vogel and Woerth—15.

The Assembly then passed the measure and sent it to the Senate.

Alumni, faculty members, and friends of the University of Illinois College of Medicine are planning a luncheon Wednesday, May 22nd, during the state meeting of the Illinois Medical Association at Rockford, Ill. Wisconsin members are invited to attend.

Convalescent Serum Center Established at Columbia Hospital, Milwaukee; to Serve State

A CONVALESCENT serum center was recently established at Columbia Hospital with the cooperation of the Milwaukee Board of Health. The purpose of this center is to collect, prepare and dispense human convalescent sera for the prevention, attenuation and treatment of various infectious diseases.

Blood serum withdrawn from patients recently recovered from scarlet fever is of value in the prevention of scarlet fever in those who have been exposed to the disease. It is also of value in treating patients with scarlet fever. The serum should be administered early in adequate dosages. Marked improvement is usually seen in from twelve to eighteen hours when the serum is given during the first three days of the disease. The number of complications occurring in scarlet fever is reduced through use of the serum.

The attempt should be made to prevent measles in exposed children who are undernourished or who are suffering from some other illness. When convalescent measles serum is given to children within five days after exposure, it will prevent the onset of measles in 98% of the instances. If the injection of the serum is delayed until the eighth day of the exposure, attenuation of the disease will usually occur, resulting in a very mild attack, which, however, is followed by permanent immunity. This method of attenuating measles is the one of choice in healthy exposed children.

Since this is human serum and not a foreign serum, the question of reactions can be almost disregarded.

Both scarlet fever and measles convalescent serum may be obtained from the Serum Center at present by physicians throughout the state.

Naturopaths Seek License In Wisconsin; Assembly Bill Proposes Exemption for Present Practitioners

NATUROPATHS would be licensed in Wisconsin under the terms of Assembly Bill 451A introduced by Assemblymen Grobschmidt and Kaiser, of Milwaukee. The bill had its public hearing before the Assembly Committee on Public Welfare early in April, at which time J. B. Harr, Milwaukee; Homer C. Bader, Chicago; E. P. Ries, Sheboygan; S. J. Tarnowske, Milwaukee; William Rossa, Milwaukee; I. R. Krus, Racine; Will Scobie and W. E. Dentinger, Milwaukee, appeared to favor the measure in addition to Assemblyman Grobschmidt, one of the joint authors.

The bill was opposed by J. G. Crownhart, Secretary of the State Medical Society of Wisconsin.

"On this measure, as in all other bills licensing or extending the existing licenses of those to treat the sick," said Mr. Crownhart, "the Legislature is not bound to authorize types of practice except as it can be demonstrated that (a) the public welfare will be served thereby, and, as important, (b) no hazard to the public health will be created. It is insufficient to maintain that the method of treatment itself is of a harmless character. No treatment, whatever its nature, can be deemed harmless in event that it is applied in a case wherein it is not the correct treatment.

"We need spend no time today in any protracted discussion of the methods of nature healers. We point out that under their own definition, regardless of its peculiar wording, these men would be licensed to do everything that a physician and surgeon may do with the sole exception of administering those of the narcotic drugs which are derived from herbs. Specifically, this bill would license

these men to care for the woman in childbirth, venereal diseases, hernias, cancer, tuberculosis, fractures, brain tumors, gallstones, typhoid fever, infantile paralysis, heart disease, Bright's disease, and other ills of a major character.

"These men would be licensed without any examination before any board, so long as they submitted a statement that they had completed a course in naturopathy in a school and were practicing in the state as of January 1, 1935. And, moreover, they would have until September 1, 1935, in which to present this evidence.

"These men, licensed without any examination whatsoever, would then under the terms of their bill, be permitted specifically to use:

1. The x-ray for diagnosis and treatment in unlimited voltage.
2. Radium, which can be rented.
3. Administer all the dangerous coal tar products.
4. Administer dangerous vegetable herbs and derivatives, including digitalis, nux vomica, aconite, cocaine, and cinchona.
5. Use any of the earth salts including mercury and arsenic."

Mr. Crownhart pointed out that the bill would also permit these unexamined men to qualify "as physicians under the provisions of the Workmen's Compensation Act"; would permit them to sign death certificates and treat contagious and communicable diseases.

"Whether or not," concluded Mr. Crownhart, "there is any essential difference between what a naturopath might do under the terms of this bill and what now constitutes the full practice of medicine and surgery, would take at least the opinion of the Supreme Court to establish."

The Committee had not reported the bill at the time this Journal went to press.

Chiropractors Seek to "Short-Circuit" Basic Science Act

CHIROPRACTORS wishing to be licensed in Wisconsin would take their examination in the basic sciences before the Wisconsin Board of Examiners in Chiropractic rather than under the Basic Science Board itself, under the terms of Assembly Bill 421, sponsored by Assemblyman Busby, of Milwaukee. The author of the bill, and representatives of the Chiropractic Association urged passage of this measure before the Assembly Committee on Public Welfare at an open hearing the middle of April. The bill was opposed by the State Medical Society of Wisconsin and Dr. C. A. Harper, State Health Officer.

Asserting that only ten chiropractors have been licensed in Wisconsin since the passage of the Wisconsin Basic Science Act ten years ago, Assemblyman Busby declared that his bill would place the Basic Science examination in the hands of the Chiropractic Board. He declared that the present law will bring about the almost complete elimination of chiropractors from the state.

"Your idea then," asked Chairman Dueholm of the Committee, "is to have the examiners men in sympathy with the chiropractors?"

To this question, Mr. Busby replied significantly, "Yes."

Appearances for the bill included former Assemblyman Grimstad, of Mt. Horeb, Dane County, who was Chairman of the Assembly Committee on Public Welfare when the Basic Science Act passed. He declared that the law had worked out in an unreasonable manner and that as result the people would soon be denied chiropractic treatment for want of new chiropractors in the state. Others appearing in favor of the bill included Mr. H. J. Lowry, Madison attorney and legal counsel for the Wisconsin Chiropractic Association; Mr. Nelson, President of the Wisconsin Chiropractic Association, Barron; Mr. E. M. Cardell, Kenosha chiropractor. Upwards of 125 chiropractors and members of their families were present to register as favoring the measure.

Opposition to the measure was presented

by the Secretary of the State Medical Society in the following statement:

"The Wisconsin Basic Science Law and the act establishing a Board of Examiners in Chiropractic were passed as companion bills in the Legislature of 1925. They have remained on the Statutes in the intervening ten years in the exact form in which they were passed. Both on the part of the medical profession and the chiropractors there were irreconcilable differences of opinion on certain proposals in addition to those which appear in the two laws today. The laws as they stand, however, were passed as result of the written request signed by both the representatives of the Society I represent, and the Wisconsin Chiropractic Association.

"There has been no effort on the part of the medical profession to change either law. There have been repeated efforts on the part of the Chiropractic Association to change both laws in every Legislative session since their enactment.

"The Wisconsin Basic Science Law simply provides that, regardless of what field of treating the sick a man intends to pursue in this state, before he goes to his professional licensing board he shall demonstrate to a non-partisan board that he has sufficient knowledge in the subjects of anatomy and physiology (the body and health), pathology (the body and disease), and diagnosis so that he can use ordinary skill and care in determining first of all with what disease a given patient is afflicted.

"This is a basic public health law of the state, and the state has a very proper and important interest in this protection to its citizens. Obviously, if a man were licensed to practice who could not use the ordinary care and skill in recognizing a case of smallpox in a school child, for instance, he might be the cause for spreading that disease among other unprotected children of the community. It is a protection to the citizen for obviously if a practitioner could not use the usual care and skill and thus failed to recognize a case of cancer in its incipiency, a whole family might be dependent upon the state because the earner did not receive proper treatment until too late to accomplish a cure.

Safeguards for Justice

"1. The law itself recognizes that all who treat the sick do not believe in or use the same methods. So that there may be no injustice in their examination, the basic science law provides (Sec. 147.06): 'No applicant shall be required to disclose the professional school he may have attended or what system of treating the sick he intends to pursue.'

"2. Secondly, the law very fully protects the candidate or any other examining board in the State (including the Board of Examiners in Chiropractic) against injustice by providing a means for court review:

" 'The candidate affected, or any state examining board for any branch of treating the sick, may commence an action in the circuit court for Dane County against the board to set aside action by it granting or denying a certificate of registration under the basic science law. In such action the complaint shall be served with the summons, and within twenty days after such service, the board shall answer, and shall cause to be filed with the clerk of the court the papers and records upon which it acted, or certified copies thereof. The issues shall be tried by the court upon such papers and records, and additional evidence in the discretion of the court. The court may (1) dismiss the action, or (2) demand the record of the board for (a) further examination or investigation, or (b) modification or reversal of its action. The attorney general shall appear in such action for the board, and no costs shall be taxed by either party. (1925 c. 284 s. 3.)'

"3. Third, the administrative members of the board, the law provides, are appointed by the Governor and confirmed by the Senate. They must be 'lay educators, none of whom shall be on the faculty of any department teaching methods of treating the sick.'

"4. Fourth, the law itself provides (Sec. 147.12) that the board may, from time to time 'from lists furnished by the State Civil Service Commission, appoint such competent and recognized experts as shall be necessary to assist in the examinations, and necessary clerks.'

"5. For the information of the Committee, I call your attention to the procedure of this examining board which is the fifth safeguard against unfairness. Each candidate is assigned a number. He writes his examination in books on the front of which appears his number and no other identification. His paper is marked and then the board, after the paper is marked, assigns the marks to the candidate's name in accordance with the number, and not until then.

Summary

"The argument for the present bill is not that chiropractors should not be examined in anatomy, physiology, pathology, and diagnosis.

"The argument for the present bill is primarily based on the proposition that the present board is unfair to chiropractors. The law itself creates a broad, specific, and easy remedy in event that any such unfairness should ever occur at any time with reference to any candidate.

"I can only assume then, Mr. Chairman, that such unfairness does not exist in fact, or a prompt appeal would have been made under the law itself. Inasmuch as no appeal has been made, we may assume that the present bill is a method of avoiding the safeguards for the public health that the state itself has erected, and the question that is before your committee is not unfairness which can be demonstrated to any court, but rather a desire to 'short-circuit' a basic public health law of the state."

State Society Bill to Create Medical Grievance Committee Advanced

IF THE Senate gives favorable consideration to Bill 267A, introduced by request of the State Medical Society, Wisconsin, like New York, will have a Medical Grievance Committee. The Society's bill, introduced by Assemblyman William Groves, Lodi, was advanced in the Assembly after a four to three Committee recommendation. Late in April the Assembly placed the bill on its final passage after a favorable recommendation by the Joint Committee on Finance. The bill has now been recommended for concurrence by the Senate Committee on Education and Public Welfare.

The proposed committee would consist of the State Health Officer, the Secretary of the State Board of Medical Examiners, and the Attorney General or Deputy Attorney General. This Committee would have the power to investigate practices of physicians only that are "inimical to the public health," with power to warn or reprimmand, or, in most serious cases, to institute criminal action.

The bill was advocated before the Assembly and Senate Committee by J. G. Crownhart, Secretary of the State Medical Society, who pointed out that it had three times been unanimously endorsed by the House of Delegates of the Society.

"While the standing of physicians as a group is exceptionally high in Wisconsin," said Mr. Crownhart, "there are bound to be, from time to time, occasional practices which require attention among any group that comprehends 3,100 licensed physicians. An action to revoke a license is not only extremely severe in its penalty, but it can only come after the physician has committed some grave offense.

"At the present time there are no means by which the state officially may counsel with a physician, and its only recourse is the drastic procedure to take away his entire means of livelihood. The present measure contemplates an official method of causing a physician to change practices that are inimical to the public health before he goes so far as to involve himself in a criminal prosecution."

The bill has been endorsed by the State Health Officer, and representatives of the Fourth and Fifth District of the Federation of Wisconsin Women's Clubs. None appeared to oppose it. Mr. T. O. F. Randolph, Burlington, member of the State Board of Optometrists, appeared at the Senate hearing to advocate that the terms of the bill be broadened to cover all branches of the healing art. The amendment was opposed by the Secretary of the State Society on the grounds that it would completely change the terms of the present measure and that the proposed amendment should be made a separate measure for separate discussion. The amendment was not reported out of the Senate Committee. At the time the Journal went to press the Senate had not scheduled the bill for action.

AMERICAN MEDICAL GOLFERS

The twenty-first annual tournament of the American Medical Golfing Association will be held at the Northfield Country Club, Atlantic City, Monday, June 10. Thirty-six hole competition will be played for the seventy prizes offered in nine events. This includes the championship event, which has as its major prize the famous Will Walter Trophy, awarded since 1923 for low gross thirty-six holes. This trophy, designed by Edgar Millar and executed by the Cellini Shop, Evanston, Ill., symbolizes the evolution of medicine.

All male Fellows of the American Medical Association are eligible to membership. A cordial invitation is extended to every medical golfer to write the executive secretary, Bill Burns, 4421 Woodward Avenue, Detroit, for an application blank.

ABORTION

(Continued from page 331)

the uterus which she has built up is not broken down. We might offer this plea "Give Nature half a chance".

REFERENCES

1. Watkins, R. E.: Am. J. Obst. & Gynec. 26:161, 1933.
2. Watson, B. P.: Am. J. Obst. & Gynec. 16: 536, 1928.
3. Taussig, F. J.: Quoted by Watkins.

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BOOKS RECEIVED FOR REVIEW

The Modern Method of Birth Control. By Thurston Scott Welton, M. D., editor of The American Journal of Surgery. Walter J. Black, Inc., 2 Park Ave., New York, N. Y.

Modern Motherhood. By Claude E. Heaton, M. D., Price $2.00. Farrar & Rinehart, Inc., New York, N. Y.

Doctors and Juries. By Humphreys Springstun of the Detroit Bar. Price $2.00 net. P. Blakiston's Son & Co., Inc., 1012 Walnut St., Philadelphia, Pa.

Names of Surgical Operations. Compiled and arranged by the Western Surgical Association through its special committee. Edited by Carl E. Black, M. D., Jacksonville, Illinois. Price $3.00. Bruce Publishing Co., 2642 University Ave., St. Paul, Minn.

Surgical Pathology of the Peritoneum. By Arthur E. Hertzler, M. D., surgeon to the Agnes Hertzler Memorial Hospital, Halstead, Kansas. J. E. Lippincott Co., Philadelphia, Pa.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

Methods of Treatment. By Logan Clendening, M. D., clinical professor of medicine, medical department of the University of Kansas. Fifth edition. Price $10.00. C. V. Mosby Co., St. Louis, Mo.

This book, a fifth edition, continues the general plan of the previous editions. The volume, divided into two parts, is concerned with the methods of treatment in internal medicine and includes not only the commoner drugs but also the technique of various procedures such as intravenous therapy, spinal punctures, etc. The first part describes the drugs and procedures, the second part considers application and results of the therapeutic measures under the heading of various diseases.

Obviously a very large field has been covered and the author's mode of presentation is interesting. This work might well serve the need of bringing together the widely scattered material of the literature. However, in the reviewer's opinion, the choice of references in the bibliography is often not ideal nor is the recommended therapy in many instances. A more serious fault which makes this book unsatisfactory is the abundance of errors, some typographical and thus unimportant but others more serious and not to be condoned. For example on page 53, a dose of 15 minims of adrenalin solution to be given intravenously is recommended in the treatment of an arsenical reaction. This dose by this route is, obviously, an overdose and one that might well prove fatal. O.O.M.

Female Sex Perversion. By Maurice Chideckel, M. D. Eugenics Publishing Company, New York, New York.

The author introduces his volume by stating that "any unnatural deviation of the sexual instinct is a manifestation of a disturbed mentality." And yet in his chapter on masturbation which treats of the subject in wholesome fashion, he accepts the data of investigators indicating that not only do a high percentage of women masturbate at some time, (Katherine Bement-Davis' figure—64.8%) but, moreover, there is no evidence of ill effect, no indication that marital adjustment is affected by it. One objects to designating so common a practice as a perversion when experience has shown that it is this unwholesome attitude which has resulted in mental suffering in those who have indulged in this erotic but normal practice. The same criticism may be made of Chideckel's chapters on homosexualism. For, again this practice is so common an experience (K. Bement–Davis in her study of factors in sex life of 2200 women reveals that 50.4% of unmarried women have had homosexual attachments—with no effect on subsequent marital life) as to nullify the author's statement that it is "an abnormality, a perversion, a monstrous craving for the unnatural by phantasy-fed, mostly frantically unhappy women with minds run riot". There should be no place for the very definitely perverted state of sadism, masochism, bestiality, fellatio in a volume which is meant to be educational for parents, teachers, and others concerned in the sexual development of the child and the youth.

This book is of small help since it adds nothing to the works of Havelock Ellis, Forel and others, and is of interest only to those in the field of abnormal psychology. It does not aid the person dealing with the everyday problems of masturbation, and the usually homosexual substitutions for heterosexual activity. M.G.M.

Mouth Infection. By Oliver T. Osborne, M. D., professor of therapeutics, emeritus, and formerly clinical professor of medicine, Yale University. Price $2.00. Published by the author Dr. Oliver T. Osborne, 1155 Forest Road, New Haven, Conn.

This book is a short monograph on infections in the mouth with a history of the present acceptance of importance of stomatology. The book is mainly concerned with stressing the importance of the structures of the mouth and pharynx in foci of infection with a clinical survey of such cases coming under observation of the author. The conclusions, on the whole, are generally accepted and are sound judgment. R.W.S.

The Treatment of EARLY SYPHILIS

THE TREATMENT of early syphilis advocated today involves such basic principles as the use of an arsphenamine as the foundation of the treatment, the use of a heavy metal as an adjuvant (preferably bismuth intramuscularly), and the continuation of treatment without a rest period for a period of one year after all symptoms and signs of the disease have disappeared.

These fundamentals have evolved from a painstaking study, by a group of university clinics in collaboration with the U. S. Public Health Service, of records covering a fifteen year period. Their report may be considered as the most authentic information available today relative to the satisfactory treatment of early syphilis. The method of treatment advocated is known as: —

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Heart Disease. By Harold E. B. Pardee, M. D., assistant professor of clinical medicine, Cornell University Medical School; associate attending physician, New York Hospital. Second edition. Lea & Febiger, Philadelphia.

This is an attractive small volume of 127 pages written for the layman, in an attempt to answer the question "What is this heart disease about which we hear so much?" The author's answer is clear and concise and he has succeeded in his task. It is gratifying to have a book of this type, if it must be written, done by one eminent in the field that he discusses and capable of presenting a rather difficult subject in an understandable way to one without technical knowledge. For perusal by selected patients, on the advice of their physician, it would appear that this book will supply a real need. For general use by an intelligent public, one may question its value or indeed the possibility that through introspection and uncontrolled imagination it may lead in many cases to imaginary disorders. There are among the public a perhaps greater number of those that suspect or fear that they have heart disease than those who actually have and in the reviewer's opinion this fear can only be allayed by a thorough examination and consultation with a qualified physician who can give a personal answer to the questions that are necessary to answer before their fears are allayed. To attempt these answers in a book, no matter how well done, leaves the situation cold and impersonal. To supplement the physician's explanation and advice, it may, however, be of considerable value. J.A.E.

Human Anatomy, double dissection method. By Dudley J. Morton, Columbia University Press. 1934. 2 vols.

Occasionally one hazards a new venture. This was done by Dr. Morton when asked to organize the work in gross anatomy at Columbia. His problem was to teach the greatest amount of anatomical fact in the least possible time. This obviously called for a high degree of organization.

The general plan is to have each student go over each part of the body twice, once for the larger structures, and a second time for detail. If he had done nothing but make this repetition possible his work would deserve high praise. The two volumes recently published show, however, that Dr. Morton and his staff worked unceasingly and effectively in the interest of their students.

It is not possible to comment on the books in any detail. It can only be said that in reading them one is conscious of thoughtful, careful, effective planning and execution. W. E. S.

Stammering and Allied Disorders. By C. S. Bluemel, M. D., (Eng.). The Macmillan Company, New York, 1935.

This little book of 182 pages presents a most fascinating and convincing discussion of the author's theory of stammering. Although concerned with psychology and neurophysiology, and consequently somewhat technical, the material is presented in nontechnical language in order that the book may be available to parents, teachers and stammerers, and not merely to those whose interest in the matter is academic.

The theory is based on the idea that speech is acquired as a conditioned reflex and that stammering results from a partial or intermittent inhibition of the reflex. Not only is the author's own theory thoroughly explained, but it is also contrasted and correlated with the other most widely used theories and practices in the science today. The last chapter is devoted to helpful suggestions for the treatment of stammering. J. E. G.

Medical Clinics of North America. Issued serially, one number every other month. Vol. 18, number 3. New York Number—November, 1934. Paper $12.00, Cloth $16.00 net. W. B. Saunders Co., Philadelphia.

The publishers of The Medical Clinics of North America announce a departure in the ordinary form of year book in that these volumes will hereafter feature commonplace problems of the general practitioner. This purpose has well been fulfilled in the reviewed volume and it constitutes a distinct movement in advance of its predecessors. There are naturally many minor points of difference, but the general plan and the context are instructive and stimulating.

The section on "The Failing Heart" bespeaks a keen insight into the basic pathologic physiology. "The Relation of the Thyroid Gland to Graves' Disease" is also an extremely sound and forward-looking presentation. Another section deals with the liberal carbohydrate diet in the management of diabetes mellitus and is thought-provoking, as is also the survey of the antitoxin treatment of erysipelas. Particularly timely is the section on the treatment of intestinal amoebiasis. In such a survey it is impossible to deal with all of the treated subjects. The only basic criticism that the reviewer would express relates to the disproportionate space given the subject of lymphadenopathy. Certainly it cannot be viewed as a true symposium as suggested by the publishers and falling short of this the discussion of the anatomy and physiology is inadequate.

The discussion of the pathogenesis of suppuration on page 648 is scarcely convincing. Furthermore, Medlar's work on the giant cells has been overlooked. On page 650 the von Pirquet is suggested whereas the Mantoux is overwhelmingly the procedure of choice. The description of the d'Espine sign is incorrect. The reproduction of the x-ray of the chest on page 653 does not measure up to the high standard of illustrations. The average duration of acute leukemia in our experience is 6–12 weeks rather than 1–3 weeks as given in the text on page 658. Technically the term lymphoblast is preferred to "large immature lymphocytes" given on page 659. On page 660 there is an inexplicable statement to the effect that since the mediastinal lymph nodes of lympho-

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Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245★

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sarcoma are not calcified they do not cast a shadow on x-ray. Exception is furthermore taken to the statement on page 670 to the effect that infectious mononucleosis is a non-epidemic disease; during one semester over twenty cases of this condition were observed in the University Infirmary and the distinct impression gathered that it was epidemic in form. The text on page 674 refers to the work of Frank and Much and the bibliography gives the first co-worker's name as Frankel. The definition of Pel-Ebstein fever on page 677 is incorrect. The treatment of tuberculous lymphadenitis with x-ray deserves a much more critical analysis than is afforded on pages 705 and 6. It is heartening to find so sound an exposition of the place and value of venesection as offered on page 733. Serious doubt occurs to the reviewer in the utility of strychnine and atropine in the treatment of decompensation as noted on page 734. The author might also have voiced the theoretic objection to intravenous fluids, and more particularly to hypertonic fluids, in his discussion on page 735. Strophanthin and Ouabain are mentioned in the same sentence on page 735 as though of different nature. In the treatment of pneumonia in childhood the author suggests the availability of oxygen for intermittent or continuous use on page 818. An extended experience indicates the inadvisability of the intermittent use of oxygen in such patients. Eserine is omitted from the list of available drugs or measures for the treatment of abdominal distention on page 824. On the same page, there is a very inadequate and perhaps misleading paragraph upon the treatment of empyema. Obviously the end of treatment of empyema at any age should be the limitation of the pyogenic process in the pleura and the evacuation of pus. Experience has proved that aspirations may be continued to advantage until the pus becomes so thick that there is very little supernatant serum upon standing for 24 hours. Thereafter rib resection may be necessary to effect complete healing; but it is then accomplished without the risk of a general purulent pleurisy.

The text is an excellent one and is recommended to the general practitioner. Accordingly the above cited objections and corrections are of lesser importance. W. S. M.

One Hundred and Fifty Years of Publishing. By Lea & Febiger, Philadelphia, Pennsylvania.

This is an interesting account of the century and a half of publishing by the well known firm of Lea & Febiger of Philadelphia, a career of which the firm may well be proud. The American Journal of Medical Sciences published by this firm is now in its one hundred and fifteenth year and with one exception is the oldest medical periodical in the English language. For an even longer period it has published prominent medical books, and has specialized in this field during the last half century. Among its well known text books are the American editions of "Gray's Anatomy" and Osler's "System of Medicine". C. R. B.

Aids to Embryology. By Richard H. Hunter, M. D., lecturer in anatomy, Queen's University, Belfast. Second edition. William Wood and Company, Baltimore.

As stated in the preface, this little pocket-sized book of 167 pages was written as an aid to students preparing for their examinations in Queen's University, and makes no pretence of being a complete account. However, it would make an excellent means by which anyone somewhat stale on the subject could refresh his memory and bring his knowledge up to date. It illustrates and describes briefly the important steps in human development and gives considerable space to the commoner anomalies and abnormalities. Much important recent work, not only in embryology, but in related fields such as the physiology of pregnancy and of reproduction is mentioned, together with the author's name and year, although no bibliography is given. The description of the circulation through the fetal heart and the changes at birth is a time-worn one, no mention being made of Patten's well-known recent work on the subject. The description of the origin of the limb muscles is confusing and inadequate. But these are flaws such as may be found in many far more pretentious works. On the whole it is an excellent little book. H. W. M.

Report on Seventh International Congress of Military Medicine and Pharmacy and Meetings of the Permanent Committee, Madrid, Spain, May 29–June 3, 1933. By Capt. William S. Bainbridge, delegate from the United States.

This is a concise report of the Congress and should be of special interest to those interested in military medicine. C. R. B.

Elementary Human Anatomy. By Katharine Sibley, professor of physical education, School of Education, Syracuse University, Syracuse, New York. Price $4.50. A. S. Barnes & Co., 67 West 44th St., New York, N. Y.

This text is written for an undergraduate course in human anatomy and primarily for students of physical education. Special emphasis is placed on the skeleton, muscles and nervous system from the point of view of corrective gymnastics and physical therapy. It should make a good text book for courses in anatomy for nurses. It is well illustrated. C. R. B.

The Crippled and the Disabled. By Henry H. Kessler Columbia University Press, New York, 1935.

This book deals with the rehabilitation of those whose productive capacity is reduced due to physical disability of all types. This large group is classified according to the following types: The Child Cripple, The Military, Industrial and Chronically Disabled and the Blind, Deaf and Dumb. The author

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The book is particularly desirable to those who are interested in the economic aspect of rehabilitation. J. I. T.

Hughes' Practice of Medicine. Revised and edited by Burgess Gordon, M. D., associate professor of medicine, Jefferson Medical College. 15th edition. P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia. Price $5.00.

The revised edition of Hughes' Practice of Medicine appears in very attractive form. As the editor, Dr. Gordon, explains in his preface the object and scope of the work have not been changed; it presents the average picture of disease and its treatment in condensed form. As a student's text book or as a handy reference book for the general practitioner, it should prove invaluable.

In the selection of new subjects treated, the editor has shown rare good judgment in including many conditions, in the knowledge or treatment of which real advance has been made and in omitting much material that is still in a controversial state.

A feature that should appeal to the busy general practitioner is the concise manner in which specific or rational forms of treatment are presented, as well as helpful suggestions for symptomatic treatment—a form of therapy frequently necessary in active practice.

The sections on Nervous Diseases and Skin Diseases are admirably presented and are in keeping with the portion devoted to general medicine in both scope and quality.

The work as a whole can be whole heartedly recommended. R. V. V.

The Patient and the Weather. By W. F. Petersen, M. D. Edwards Brothers, Inc., Ann Arbor, Michigan.

This is the second volume in a series of studies relative to the response of individuals to meteorological environment and as such presents a very interesting and new interpretation of the autonomically unstable individual often classed as nervous or neurasthenic. The volume contains a wealth of valuable and very readable material presenting the view of the author and those of many others.

The clinical reports are a series of comprehensive and detailed studies of the autonomically unstable individual in relation to his meteorological environment. The question of therapy is approached and discussed in view of this new interpretation. The book should prove of real interest to the clinician and stimulate further investigation along this new point of view. B. I.

Diseases of the Mouth and Their Treatment. By Herman Prinz, D. D. S., and S. S. Greenbaum, M. D., associate professor of dermatology and syphilology in the Graduate School of Medicine of the University of Pennsylvania. Price $9.00. Lea & Febiger, Philadelphia.

In the preparation of this work the authors have gathered together all of the enormous mass of information to be found in the literature on abnormalities and diseases of the mouth and evaluated, assorted and classified it in such a way that both medical and dental students may derive the maximum benefit from it. The presentation of this material is made in a normal, logical manner and from the chapters on the embryology, anatomy and physiology of the oral cavity through to the chapter on therapy, the many disease descriptions are arranged in chapters which separately discuss those which are of local origin, those which are a manifestation of various metabolic diseases and blood dyscrasias, those which may occur in various infectious diseases, those which are caused by animal or vegetable parasites and those which are buccal manifestations of diseases of the skin. There are separate chapters on diseases of the tongue, the lips, cheek and palate and on the floor of the mouth. A separate chapter deals with the several conditions which are of nervous origin and another chapter describes the new growths, cysts and tumors which affect the mouth. The individual descriptions are clear and concise and the only adverse comment to be made is that the photographs, cuts and plates which are supposed to be illustrative of the diseases are of questionable value if not worthless. R.L.M.

Diseases of the Skin. By Richard L. Sutton, M. D., professor of dermatology, University of Kansas, and Richard L. Sutton, Jr., M. D., assistant in dermatology, University of Kansas. Ninth edition. Price $12.50. C. V. Mosby Company, St. Louis, Missouri.

The new edition of this work is essentially the eighth edition brought up-to-date. The same general plan of presentation is followed and the book is made more complete by the addition of descriptions of nearly thirty new diseases or rather conditions which have been elevated to the dignity of entities as a result of recent dermatologic research and observation. The descriptions of coccidioidal granuloma and tularemia have been revised and the treatment of syphilis has been brought up-to-date. The reference list given after each description has been revised and the photographs changed in some instances. With these changes the book is naturally bigger and better than ever and will continue to hold its high rating with both students and practitioners. R.L.M.

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Social Psychology. By Abraham Myerson, M. D., professor of Neurology, Tufts College Medical School, Director of Research, Boston State Hospital and Visiting Neurologist, Boston City Hospital and Beth Israel Hospital. Prentice Hall, Inc. 1934.

For ready, though superficial reference, this book can be recommended. It is not entirely free of misstatements as for example on p. 542 the author states "a Catholic cannot marry a Protestant and remain in his church unless the Protestant becomes a Catholic". The section dealing with sex and especially that concerned with birth control does not appear to be devoid of prejudice and a certain moralistic attitude rather curious in a student of human frailities. For the student making his initial contact with social psychology or for the more advanced graduate who seeks to cover the subject in a rapid birds-eye manner, the book is recommended.

A. C. W.

Memoirs of a Small-Town Surgeon. By John Brooks Sheeler, A. B., M. D., emeritus professor of surgery, University of Vermont, College of Medicine, Price $3.00. F. A. Stokes Company, New York, N. Y.

A well written and interesting series of incidents from the point of view of the individual surgeon covering both the training and problems of the times from both the individual and general standpoints.

The book is interesting and is easy to read. A.C.T.

The 1934 Year Book of Obstetrics and Gynecology. The Year Book Publishers, 304 South Dearborn St., Chicago.

This Year Book reviews the outstanding articles in the literature for the year. It should be a desk copy of every obstetrician and gynecologist. The book, in short, needs no defense for its publication. R.C.

Physical Diagnosis. By Warren P. Elmer, M. D., Associate Professor of clinical medicine, Washington University School of Medicine and W. D. Rose, M. D., late associate professor of medicine, University of Arkansas. Price $8.00. C. V. Mosby Company, St. Louis, Mo.

The new, seventh edition, of Elmer and Rose's Physical Diagnosis contains all the features that in the past have made it justly popular and in addition numerous new illustrations and subject material have been added to bring the work up-to-date. New material added consists of articles on silicosis and aortic murmurs and on general diagnostic methods.

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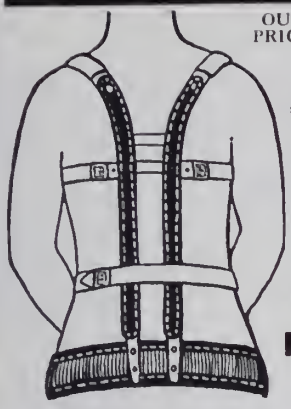

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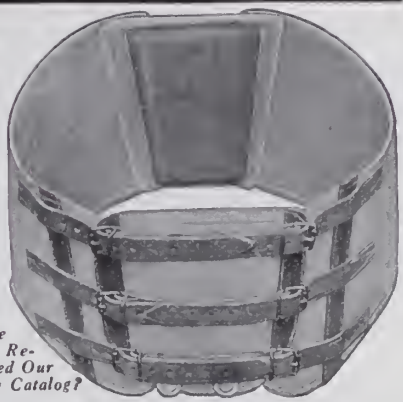

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PYELITIS OF PREGNANCY
By John W. Harris, M. D.
CORONARY THROMBOSIS
By W. M. Jerma'n, M. D.
HEART IN SURGERY
By Arthur J. Patek, M. D.
PROSTATIC RESECTION
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URINARY TRACT INFECTIONS
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TABLE OF CONTENTS PAGE 372

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TABLE OF CONTENTS

ORIGINAL ARTICLES

Page

The Early Diagnosis and Treatment of Pyelitis of Pregnancy by John W. Harris, M. D., Madison ---- 379
Coronary Thrombosis and Its Sequelae by W. M. Jermain, M. D., Milwaukee ---- 381
The Heart In Surgery by Arthur J. Patek, M. D., Milwaukee ---- 386
Prostatic Resection by Herman L. Kretschmer, M. D., Chicago ---- 390
Common Infections of the Urinary Tract and Their Treatment by James C. Sargent, M. D., Milwaukee ---- 395
Genitourinary Tuberculosis by Gilbert J. Thomas, M. D., Oak Terrace, Minn., and Thos. J. Kinsella, M. D., Minneapolis ---- 398

EDITORIALS

Constipation ---- 404

MISCELLANEOUS

President's Page ---- 406
Society Proceedings ---- 407
The Woman's Auxiliary ---- 409
News Items and Personals ---- 412
Births, Marriages, Deaths ---- 413
Society Records ---- 414
Medical Economics ---- 415
Postgraduate Course for Wisconsin Physicians in Early Recognition of Cancer and Methods for Treatment ---- 417
National Meeting at Minneapolis in June; Joint Session with Minnesota State Medical Association ---- 418
High School Debate Question Not Determined; May Reject Question of "Socialized Medicine" 419
Assembly Advances Bill to License Naturopaths in Wisconsin ---- 419
Assembly Passes Chiropractic "Doctor Title" Bill ---- 424
Medical Library Service Fills Over Five Hundred Requests in April; Available to All by Miss Gladys Ramsey, Madison ---- 426
Governor La Follette Signs Medical Grievance Committee Bill ---- 428
Books Received for Review ---- 428
Book Reviews ---- 430
Physicians' Exchange ---- 435

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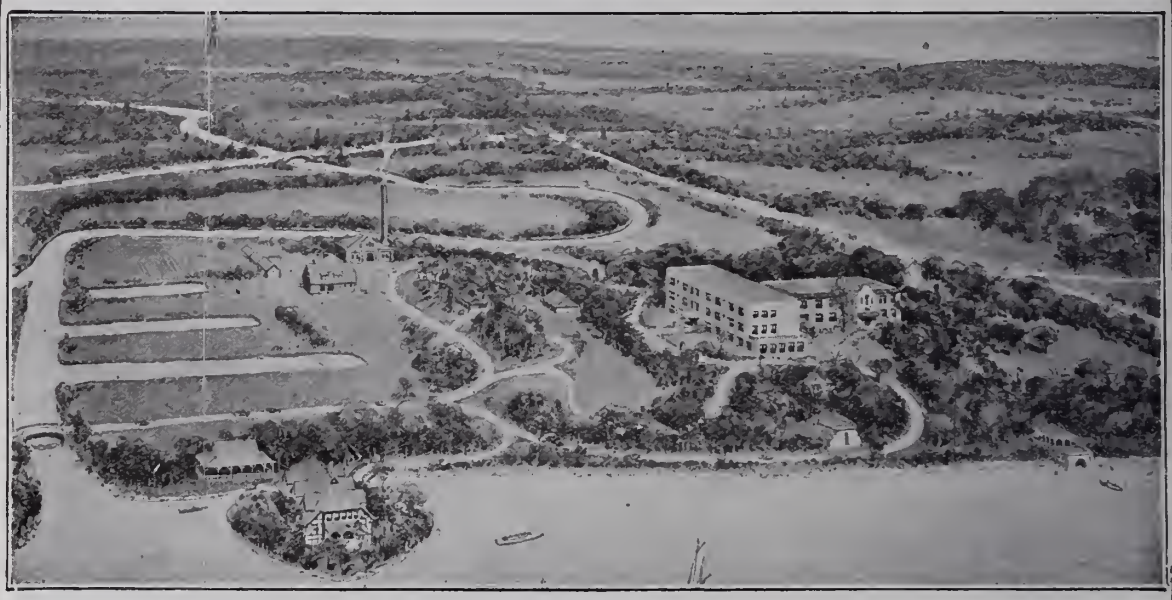

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THE WISCONSIN MEDICAL JOURNAL

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The Early Diagnosis and Treatment of Pyelitis of Pregnancy*

By JOHN W. HARRIS, M. D.
Madison

IT IS not the purpose of this paper to discuss the subject of pyelitis of pregnancy in all its various aspects but merely to point out some of the salient features in the diagnosis and treatment and to show that the disease may result in disaster when diagnosis and adequate treatment are delayed. This latter fact is shown by the following brief case summaries of five patients who have recently been under our care in the State of Wisconsin General Hospital.

Case I. Mrs. M. L., age 33, admitted to the hospital in the fifth month of her sixth pregnancy. History uneventful until six weeks before admission when she was seized with sudden pain in the right lower abdominal quadrant, chills, fever, and painful urination. Pus was found in the urine and she was treated by oral medication and bladder lavage without improvement. On admission the patient was obviously severely ill and marked secondary anemia was present. Large quantities of both red and white blood cells were found in the urine and cultures of separate ureteral catheter specimens showed a bilateral infection with both streptococci and B. coli. In spite of repeated transfusions and the use of indwelling ureteral catheters the patient rapidly grew worse, developed a severe jaundice and became markedly toxic. Pregnancy was terminated and the patient delivered of a premature stillborn fetus. This resulted in rapid improvement and the patient was soon free of symptoms. However, she has reported for follow-up studies three times since her discharge and, while she is free of symptoms, separate ureteral catheter specimens show positive cultures of B. coli. The patient undoubtedly now has a chronic pyelonephritis.

Case II. Mrs. C. Y., age 20, admitted in the fifth month of her first pregnancy. History uneventful until two weeks before admission when she developed acute abdominal cramps, vomiting, chills and fever. A diagnosis of typhoid fever had been made, for which she was treated without improvement. The patient was severely ill with bilateral colon bacillus pyelitis, and, failing to improve under conservative treatment, which included repeated use of indwelling ureteral catheters and transfusions, pregnancy was terminated and the patient delivered of a premature still-born, macerated fetus. This was followed by rapid improvement and disappearance of symptoms. However, upon her discharge from the hospital positive cultures of B. coli were obtained from both ureteral catheter specimens. We have been unable to make follow-up studies on this patient.

Case III. Mrs. A. S., age 28, admitted in the sixth month of her first pregnancy. Symptoms were of three weeks' duration, and, while the diagnosis of pyelitis was made, only oral medication was given without improvement. The patient was found to have a bilateral colon bacillus pyelitis. She developed intense jaundice, became markedly toxic and it was necessary to terminate the pregnancy in spite of the use of conservative treatment for a period of three weeks. This was followed by rapid disappearance of symptoms. However, the patient has been seen twice since her discharge and she now has a moderately severe chronic bilateral pyelonephritis.

Case IV. Mrs. I. D., age 18, admitted in the sixth month of her first pregnancy. History uneventful until six weeks before admission when she was suddenly seized with chills and fever. A diagnosis of tularemia was made and the patient treated by oral medication. Intense jaundice developing, the patient was sent to the hospital where it was found that she had severe bilateral streptococcic pyelitis. Conservative treatment for eighteen days proved of no avail so the pregnancy was terminated, resulting in prompt recovery. The patient was seen three months after discharge from the hospital. She was free of symptoms and bilateral ureteral catheter specimens were sterile.

Case V. Mrs. M. G., age 31, admitted in the second month of her fifth pregnancy. During the last pregnancy nine years ago she had a severe kidney infection and was in bed for three months. Since then she has had several attacks of chills, fever, pain in the right side and painful urination. Such an attack began one month before admission and failed to respond to oral medication. The patient has a severe bilateral colon bacillus pyelonephritis. Sev-

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* Presented before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, September 1934.

From the Department of Obstetrics and Gynecology, the University of Wisconsin.

enteen days after admission she had a spontaneous complete abortion, and has greatly improved. She is still in the hospital but there is little doubt that she will have a residual permanent kidney damage.

Pyelitis is undoubtedly the most frequent serious complication of pregnancy. In large hospital obstetric services it exceeds vomiting of pregnancy severe enough to require hospital admission. It is generally stated that five to six per cent of all pregnant women develop pyelitis. These figures are based on hospital statistics and do not include the milder cases that are not admitted.

Time does not permit adequate consideration of the etiology of pyelitis of pregnancy. However, it is now established that from the onset of pregnancy with the hypertrophy and congestion of the cervix and parametrium, there is an accompanying congestion of the urethra, trigone and lower third of the ureter. As pregnancy progresses there occur hypertrophic changes in the ureter with marked increase in the muscle and connective tissue. The ureter and kidney pelvis become elongated and tortuous. The result is urinary stasis with dilatation of the kidney pelvis. In other words, the changes in the urinary tract during normal pregnancy all favor the occurrence of pyelitis. There is still much discussion as to the route of infection and probably the hematogenous, lymphogenous and urogenous routes all are factors. Bacteriologic studies show that the large majority of cases of pyelitis of pregnancy are due to the colon bacillus, although not infrequently streptococci and staphylococci are found.

DIFFERENTIAL DIAGNOSIS

The differential diagnosis is not difficult when a few cardinal principles are remembered. The disease is most frequently confused with appendicitis, cholecystitis, pneumonia, typhoid fever and influenza. Due to the abnormal angulation of the right ureter the symptoms of pain and tenderness frequently predominate on the right side. This explains the confusion of the disease with acute appendicitis. When it is remembered that there is no evidence that pregnancy increases the incidence of acute appendicitis, and, at the same time, pyelitis is the most frequent serious complication of pregnancy, the latter should be the first thought when the pregnant woman complains of chills, fever and pain in the right lower quadrant of the abdomen. While the history, physical examination and blood count are of invaluable assistance, the diagnosis rests upon repeated examinations of catheterized urine specimens. Due to the congestion of the ureter a number of specimens may be examined before gross pus cells are discovered. For this reason, the disease can not be ruled out by a few examinations. Culture of the urine is a more reliable diagnostic aid and will usually reveal the infection in the absence of microscopic findings.

Once the diagnosis is made the patient should be put at complete bed rest; Fowler's position with frequent changes from side to side seems to favor drainage. A bland diet, elimination of intestinal stasis, forcing of fluids, and the administration of alkalies will usually result in cure of the milder cases. Foci of infection, especially teeth and tonsils, should be searched for and eliminated. In the more serious cases the alternate changing of the reaction of the urine from acid to alkaline may prove of benefit. Our personal experiences with the various urinary antiseptics have been uniformly disappointing. However, if they are to be used it is well to recall the recent work of Miller and Chu of Michigan who showed that antiseptics are of value only in urine of high specific gravity. Therefore, fluids should not be forced but restricted. We have had no experience with the ketogenic diet in pyelitis of pregnancy. The frequency with which severe acidosis occurs in pregnancy and its serious effects have made us hesitate to produce the condition deliberately.

Our own experiences with pyelitis of pregnancy have impressed us with the value of ureteral catheterization in all patients who do not quickly respond to medical treatment. It must be remembered that many cases become chronic with frequent exacerbations and not a few patients suffer permanent damage of kidney function. Follow-up studies of our patients have impressed us with the necessity of rapidly clearing up the infection if permanent kidney damage is to be avoided. Catheterization of the ureters re-

moves the factor of urinary stasis and permits free drainage of the kidney pelvis. Our results have been so satisfactory, that we are resorting to this procedure more and more frequently. Catheters are inserted in both ureters in spite of unilateral predominance of signs and symptoms. They are left in place for four to six days and are reinserted if necessary. It is obvious that general supportive measures should be employed, and in this connection, I can not emphasize too strongly the value of repeated blood transfusions. Grave secondary anemia is usually present in the severe cases and transfusion not only overcomes the anemia but increases the patient's resistance to combat the infection.

The early diagnosis and adequate treatment of pyelitis of pregnancy have made the necessity of terminating gestation a rarity. However, as shown in four of our cases, it must be resorted to occasionally as a life-saving measure. In addition, it must be remembered that spontaneous abortion and premature labor occur frequently, due to the long continued fever and toxemia. The high fetal mortality—estimated by various authors to be from twenty to thirty per cent—is illustrated by the cases we have reported in that fetal death had occurred some time before delivery in four of our five patients.

SUMMARY

1. Pyelitis is the most frequent serious complication of pregnancy.

2. It is frequently mistaken, being confused with a variety of other diseases, most often appendicitis.

3. Simple rest and elimination will result in cure of the milder cases.

4. Ureteral catheterization is a most valuable curative procedure.

5. The disastrous effects, both maternal and fetal, that result from delay demand that the diagnosis of pyelitis of pregnancy be made early and adequate treatment be instituted promptly.

Coronary Thrombosis and Its Sequelae*

By W. M. JERMAIN, M. D.
Milwaukee

CORONARY thrombosis is one of the most serious, purely medical emergencies the physician has to deal with. His diagnostic ability is often tested to the utmost, particularly in those cases in which the signs and symptoms simulate an acute surgical disease of the upper abdomen. To be able to meet this problem and correctly interpret the picture requires a ready familiarity with the symptomatology of the disease which can only be obtained by frequent clinical contact or constant mental repetition of the evidence. With the hope that it will refresh the mental picture carried by many of us, the following presentation is given.

It is only rarely that thrombosis occurs in a coronary vessel which is healthy. Generally, marked narrowing from arteriosclerotic changes in the wall precedes the development of a thrombus within the lumen. Such narrowing of the coronary vessels results in insufficient blood supply to the heart muscle—at first only when extra work is demanded of the heart—after a time even when the heart is unburdened, as during sleep. Consequently it is common to obtain a history of painful seizures at times typical, again only suggestive of angina pectoris. In many, no such history can be obtained or the presence of pain or distress about the heart on exertion is admitted only after pointed interrogation of the patient or relatives. It is unfortunate that mild distress or pain in the precordial or epigastric regions, occurring in middle-aged or elderly individuals, particularly after meals or exertion, is misinterpreted and minimized by the public generally,—by the physician not infrequently.

While the symptom complex of angina pectoris is definitely brought on, at least in the early stages by exertion, the accident of coronary thrombosis frequently occurs during rest. The victim is suddenly seized by an

* Presented before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, September 1934.

intense, agonizing pain, constricting or squeezing in character, located in the chest or upper abdomen. Usually referred to the region of the sternum, it may radiate to the shoulder and arms, especially the left, and at times to the neck and face. The pain is steady, persistent and even intensified, as the attack proceeds in spite of the use of opiates. Great agitation may take hold of the sufferer so that he constantly rolls about in bed or sits up. A remarkable feature of the attack is the mental clarity which is demonstrated by the patient making his suffering the more intense. If death occurs at this time it is usually due to fibrillation of the ventricles; occasionally it may be due to ventricular stand-still, the result of heart-block.

The appearance of an individual suffering from coronary thrombosis indicates the very serious nature of the attack. The skin is cold, covered with sweat and the combination of pallor and cyanosis give it an ashen-gray color. Dyspnoea is usually marked. Vomiting not infrequently occurs. The rapid development of a pulmonary edema is indicated by a persistent cough with the expectoration of blood-tinged, frothy sputum.

The pulse is small or impalpable,—rapid in rate and at times irregular. On auscultation the heart sounds are often weak and indistinct, increased in rate and a typical gallop rhythm may be present. The heart may be found to be enlarged and a systolic murmur audible at the apex. Examination of the base of the lungs usually results in the finding of moist rales. The blood pressure generally drops either immediately or during the first few days after the attack. Rigidity of the upper abdominal muscles may be present and confuse one as to the seat of the trouble.

In the twenty-four to forty-eight hours following the attack the pain gradually subsides. During this time and the next two or three days an elevation of temperature to one hundred or one hundred and one degrees Fahrenheit is not uncommon. With it an increase in the number of leucocytes to twenty or twenty-five thousand per cubic millimeter occurs. Signs of cardiac insufficiency are to be looked for during this period. Disturbances of rhythm such as frequent extrasystoles, paroxysmal tachycardia and auricular fibrillation may occur. Enlargement and tenderness of the liver and edema of the dependent portions of the body are to be looked for. A pericardial friction sound heard during the few first days after a coronary thrombosis is very positive evidence of infarction of the heart muscle. Many cases do not reveal this sign however,—it resulting usually from thrombosis of the anterior descending branch of the left coronary with an area of infarction extending through the ventricular wall and involving the epicardium.

After a period of days, the symptoms and signs gradually disappear, the heart attains a more normal rate and the patient again feels well. The blood pressure may rise to its former level or it may permanently remain low. Levine believed that of his patients those who did best were those who showed a marked fall with only a slight subsequent increase in blood pressure.

The picture presented is that of the usual onset and course of coronary thrombosis. A case report from the records of the Milwaukee County Hospital, typical of an attack of coronary thrombosis, is the following:

W. C., aged 56, male, entered the hospital May 6, 1932, with a complaint of intense pain in the chest and the expectoration of bloody sputum. Two weeks before entrance he had an attack of severe pain in the chest coming on while he was in bed. Marked dyspnoea accompanied the attack. The day before entrance to the hospital he developed a burning pain in the precordium increasing in intensity up to the time of admittance. His past and family history were immaterial. On physical examination he was found to be a large, obese man with marked dyspnoea and persistent cough. His temperature was 100° Fahrenheit rectally, pulse 132 and respirations 32. He vomited at intervals. The lung bases were filled with moist rales. His color was ashen-gray and there was slight cyanosis. The heart apex beat was not palpable. The heart sounds were very rapid and muffled. There was a gallop rhythm and the blood pressure was 124 systolic; 80 diastolic. During the next few days his temperature came down to normal and his blood pressure gradually declined to 110 systolic and 70 diastolic. The pulse remained rapid and he coughed a great deal. His respirations were at times of a Cheyne-Stokes type and he was troubled with singultus at intervals. In spite of this he felt better and slept fairly well with the aid of narcotics. On the eighteenth day in the hospital he suddenly died while lying in bed. On en-

trance his urine contained some red blood cells and his leucocyte count was 20,700.

A necropsy revealed an enlarged heart with a reddish discolored area beneath the epicardium of the anterior aspect of the left ventricle near the apex. An infarct was found at the site of the hemorrhage which involved the wall of the ventricle and about two-thirds of the inter-ventricular septum. A small heart aneurysm was found in the apex of the left ventricle. There was a thrombus occluding the anterior descending branch of the left coronary artery. The walls of all the coronary vessels were thickened by calcified plaques and their lumina narrowed. The postmortem examination was otherwise negative except for a congestion and edema of the lungs.

Atypical attacks, lacking a number of the outstanding features detailed above, are not uncommon especially in older individuals and in those in whom cerebral sclerosis has dulled the mental acuity. In patients suffering from fibrous myocarditis and cardiac insufficiency the result of long standing coronary sclerosis, the development of a coronary occlusion may not be accompanied by severe pain. The only evidence found was a sudden increase in the dyspnoea accompanied by weakness or loss of consciousness followed by rapid aggravation of the signs of cardiac failure.

DIFFERENTIAL DIAGNOSIS

To distinguish coronary thrombosis from angina pectoris is important because of the serious immediate prognosis of the former and the difference in treatment of the two conditions. As has been stated, angina pectoris usually is directly related to exertion whereas coronary thrombosis frequently occurs during rest or sleep. The pain of angina pectoris has a duration of minutes while that of coronary thrombosis lasts hours or days. The sufferer's attitude differs in the two conditions. The immobile, rigid attitude of angina pectoris is in sharp contrast to the agitated, restless actions occurring during coronary thrombosis. Evidence of shock, such as the cold, moist skin, ashen-gray in color, and the marked drop in blood pressure are absent in angina pectoris. Dyspnoea is also uncommon. Rarely does the pain of angina pectoris radiate to levels below the diaphragm and never is there rigidity of the abdominal muscles in this condition. Disturbances of rhythm, particularly the gallop rhythm, while common in coronary thrombosis, rarely occur in angina pectoris. A rise in the temperature and in the number of leucocytes does not occur after angina pectoris except in those cases formerly known as "status anginosus" in which coronary occlusion and infarction of the heart muscle has occurred.

A typical case of "status anginosus" is the following:

E. R., male, aged 57, entered the hospital with a complaint of severe pain in the chest. He had had similar attacks over a period of four or five years; at first only on exertion, later also after excitement and finally while lying quietly in bed. During the months immediately preceding his entrance, he was troubled with dyspnoea on the slightest exertion, orthopnoea and edema of the ankles. Amyl-nitrite or nitroglycerin had always relieved the pain previously. During the twenty-four hours preceding entrance he had repeated attacks of the pain. On entrance his lips were somewhat cyanotic and his face was pale and covered with sweat. His heart was enlarged and the rate was very rapid but regular. His blood pressure was 100 systolic, 82 diastolic and there were many moist rales in the bases of both lungs. In spite of the use of nitroglycerin and repeated doses of morphine the attacks of pain recurred, and, fifteen hours after entrance, he suddenly expired during an attack. A necropsy revealed an enlarged heart with a dilated, thin-walled left ventricle having an aneurysmal dilation the size of a walnut at the apex. On the septal aspect of the left ventricle there was a large mural thrombus overlying an infarcted area in the wall. The coronary vessels were narrowed, particularly the anterior descending branch of the left coronary and there were thick atheromatous deposits but no thrombi within the lumina.

Particularly difficult of differential diagnosis are those cases of coronary thrombosis in which the pain is referred to the upper abdomen. When, as occasionally happens, no attacks of angina pectoris precede the onset of the thrombosis, the attention of the examiner is easily led away from the heart. Such findings as rigidity of the muscles of the upper abdomen, with localized tenderness and vomiting, even a subsequent jaundice, certainly indicate an extra-cardiac disease, though all do occur in coronary thrombosis. When in addition a fever and leucocytosis is found the picture of an acute gallbladder colic or a ruptured gastric ulcer becomes complete.

In the differential diagnosis of these con-

ditions a careful inquiry into the history is necessary since the discovery of the occurrence of slight distress or pain on exertion rather than after eating is extremely important. The sex and age of the patient should be considered since gallbladder disease is about four times as common in women as in men, while the opposite is true of coronary occlusion. The age of onset of a gastric ulcer or a cholecystitis is commonly much earlier than that of coronary disease. The most important differential findings, however, are those related to the cardiovascular and respiratory systems. The presence of a rapid heart rate, a gallop rhythm, dyspnoea, slight cyanosis, cough, falling blood pressure, a pericardial friction rub and electrocardiographic evidence when available, are the findings on which the diagnosis of coronary thrombosis should be based.

Illustrative of the difficulties encountered in the differentiation of gallbladder disease and coronary thrombosis is the following report:

O. K., female, aged 45, entered the hospital with the complaint of sudden onset of severe pain in the epigastrium accompanied by nausea and vomiting. The pain came on about fifteen minutes after a meal during which she ate heartily of pork and gravy. Following this attack, she was unable to eat anything without becoming distressed and troubled with excessive belching of gas. She had had a hypertension for a number of years. She also complained of palpitation of the heart, cough, dyspnoea and some edema of the ankles. On physical examination her blood pressure was 180 systolic, 130 diastolic. Her heart was enlarged to the left, the rate was rapid and there was a gallop rhythm with a systolic murmur in the aortic area. The lungs were clear. The abdomen was very large, obese, and there was tenderness and some rigidity in the right upper quadrant. An indistinct mass believed to be a distended gallbladder could be felt in the same region. There was a leucocytosis of 17,000 cells. The cardiac symptoms and the signs were erroneously considered to be due to the hypertension. The patient was operated on for a supposed cholelithiasis. At operation the liver was found to be enlarged, the gallbladder contained no stones and a moderate amount of free fluid was found in the abdomen. Pathologic examination revealed a chronically inflamed gallbladder. Following the operation there was continuous drainage of ascitic fluid from the wound but the general condition of the patient improved. The dyspnoea and edema of the ankles disappeared and the heart rhythm became normal although the rate remained rapid. Two weeks after entrance the heart suddenly became gallop in rhythm with signs of shock, although the patient did not complain of pain. The blood pressure dropped to 136 systolic, 120 diastolic; later to 126 systolic and 90 diastolic. Edema of the legs recurred and the temperature which had been normal a number of days suddenly rose to 100° F. and remained so with remissions for four days. Five days later the patient suddenly became cyanotic, the pulse very rapid and weak, the breathing stertorous and death occurred in a few minutes.

At necropsy no intra-abdominal cause for the ascites could be found. The heart was considerably enlarged. The coronary arteries were stiff and their walls thickened. The lumen of the anterior descending branch of the left coronary artery was extremely narrow. In the apical region firmly attached to the septum was a large mural thrombus the size of a plum. Beneath the thrombus the walls of the left ventricle were extremely thinned out.

Acute pulmonary disease may at times be confused with coronary thrombosis. The onset of acute pain in the chest with dyspnoea, cough, rales in the bases of the lungs, fever and a leucocytosis suggest the early stage of a pneumonia. An unusual case seen about three years ago simulated a coronary thrombosis very closely. As the result of the rupture, through the diaphragm, of a subphrenic abscess on the left side, the patient presented a typical picture of coronary thrombosis with intense precordial pain, dyspnoea, cyanosis, shock, low blood pressure and a frothy, bloody expectoration. It was not until twelve hours later when definite signs of a massive empyema were obtainable, that the diagnosis was definitely established.

SEQUELAE

Omitting the disturbances of rhythm which may occur either immediately or within the first few days, the sequelae of coronary thrombosis and cardiac infarction are the following:

1. Rupture of the softened infarcted wall of the heart with the development of a hemopericardium and death.

2. Embolism from the thrombus which commonly forms on the endocardial surface over an infarct.

3. Aneurysm formation at the site of the thinned-out portion of the wall following the healing by scar tissue replacement of an infarct.

4. Progressive myocardial failure from the replacement of muscle by scar tissue.

Rupture of the softened wall of the heart usually occurs within the first ten days or two weeks. There are no premonitory symptoms and death is generally sudden. In their study of 654 cases of rupture of the heart, Krumbhaar and Crowell found that coronary thrombosis or sclerosis with infarction was by far the most common cause of this accident.

When the infarcted area of the heart wall extends inward to the endocardial lining there is always a thrombus formation over the area. This mural thrombus often is the origin of emboli which may suddenly change the picture from uneventful convalescence to one of grave prognostic import. Sudden death may result from cerebral embolism. Peripheral emboli in the extremities or the kidneys may add a burden which the already overtaxed vitality is unable to carry. Pulmonary emboli from a thrombus in the right ventricle may seriously interfere with the circulation or may result in fatal pulmonary damage.

With the healing of the infarct and the replacement of the necrotic muscle by fibrous tissue an area of reduced resistance results. Intra-cardiac pressure often causes an aneurysmal dilatation at this point which cannot be discovered by physical examination. A constant threat to life, it may rupture under undue strain even months after the attack of coronary thrombosis.

Progressive myocardial failure may result because of the destruction of too much of the muscle and its replacement by fibrous tissue. The symptoms and signs of congestive failure develop and may progress in spite of treatment. In some cases, however, rest and digitalis improve the cardiac action sufficiently so that a restricted mode of living can be carried on for a number of years.

TREATMENT

The treatment of coronary occlusion is still so hopelessly inadequate, and probably always will be, that one can only look forward to the time when sufficient knowledge will have been acquired so that coronary sclerosis in company with general arteriosclerosis can be prevented.

The relief of the agonizing pain is the first and foremost part of the treatment of the attack. For this purpose morphine in adequate dosage is necessary. One-quarter (1/4) or one-half (1/2) grain doses should be given immediately and repeated at intervals until the pain is relieved or at least lessened so as to permit the patient to relax. Amyl-nitrite or nitroglycerin are of no value and may even do harm by lowering the blood pressure to dangerous limits.

Though there is considerable shock in coronary thrombosis, the usual methods of treating such a condition are to be avoided. The patient should be kept warm but stimulants are not to be used unless the blood pressure has dropped so low that death seems imminent. The drop in blood pressure probably results to some extent from vascular dilatation and no doubt is protective in that it reduces the work of the heart.

Oxygen when available should be administered particularly in those cases with marked respiratory symptoms. In the administration of oxygen the advice of Kilgore should be followed, i.e., it should be given in sufficient amount; in a tent, and should be only gradually discontinued.

Digitalis has no value in the treatment of this condition during the first few days, and its use should be reserved for the treatment of congestive failure, which develops later. When a sudden heart-block arises adrenalin in small repeated doses is of value. Ventricular tachycardia, a rare but serious disturbance of rhythm, is best treated by quinidine sulphate. Constant nursing care with the avoidance of any physical or mental exertion is of the greatest importance. The diet should be light but nourishing.

During the four to six weeks after the attack, when the patient should be absolutely confined to bed, theobromine or theophylline preparations are to be given for their vasodilator effect on the coronary vessels. After six weeks the patient may gradually be allowed to get up and about.

Though the immediate mortality of coronary thrombosis is about 50 per cent and the average duration of life is about three years, there are individuals who have survived an attack for many more years.

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The Heart in Surgery*

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IF A CHAIN is but as strong as its weakest link—then it must be conceded that the integrity of the heart is vital to the successful outcome of surgical measures. Other organs may claim an important place in the chain, but the cardiovascular group doubtless leads all the rest. Recognition of this fact, through intimate co-operation of surgeon with clinician, has proven its value to the patient who should have first consideration, and to the surgeon upon whom rests the responsibility of the outcome. It cannot be denied that too often there is heedless disregard of the importance of evaluating a patient's preoperative cardiac state; and it may in all truth be said that among the preventable surgical deaths are to be found many who were given inadequate consideration before operation. This is a grave indictment, but it must be met honestly.

It is my purpose in this paper to submit to you largely the work of others—a compilation of published statistical data from clinical centers where group and follow-up study made possible a careful analysis of surgical cases—from preoperative cardiovascular scrutiny to postoperative results. And while I could cite numerous instances of my own observation, no such study is adequate save where large numbers of cases are at hand which can be followed under uniform conditions and auspices, and by individual observers.

Operability of a patient varies with the operator's concept of the immediate need of surgery; with his judgment as to the type of operation; and with his estimate of the patient's ability to withstand the strain. While it is difficult to classify patients who have a cardiac defect, and to grade them as to their cardiac reserve merely on the basis of such individual defect, an effort has been made to group various types of cardiovascular disease in order to give at least a relative estimate of their operability; and it is a number of these studies which I wish to place before you under the following chapter headings:

Valvular Heart Disease
Chronic Myocardial Degeneration (Myocardosis)
Angina Pectoris and Coronary Thrombosis
Hypertension
Heart in Pregnancy

Statistics of this sort may, of course, be misleading because they depend greatly upon the individual skill and judgment of the surgeon and physician in charge. And again, risks of the same general character vary greatly; the type of operation may alter a particular case; and individual factors aside from physical findings are important but unknown elements. But I think the collected data are interesting and instructive, and the few I have selected have, in my opinion, a decided practical value.

VALVULAR HEART DISEASE

While we no longer clothe various valvular lesions with the differentiating values of the older clinicians, we do maintain an academic interest in lesions of the valves, but have learned to place most of the burden of incompetence upon myocardial features and abnormal nerve impulses. However, there is much variance in the susceptibility of valves to damage and in their vulnerability to superimposed infections, and therefore, from a

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prognostic standpoint, emphasis must be placed where it belongs.

Butler, Feeney and Levine (J.A.M.A. 7/12/30) collected the results of 147 operations in 120 patients suffering from chronic valvular disease. Of these, 40 were nose and throat cases—therefore a consideration of minor import; the balance covered a wide surgical range. Of the 120 patients, 72 had mitral stenosis, 37 aortic disease, and 11 mitral insufficiency. Of these 120 patients but 3 died—certainly an unexpectedly small percentage of fatality.

It is obvious that there is a differential in favor of certain types of valvular disease. Doubtless the one most feared is mitral stenosis. My experience is like that of the writers quoted, having followed quite a number of high-grade stenoses through the operating room without encountering any significant complications. The general conclusion is, I believe, justified, namely: that patients suffering from valvular disease (not, of course, in the stage of decompensation) undergo surgical operations very satisfactorily, provided they receive adequate preoperative consideration.

CHRONIC MYOCARDIAL DEGENERATION

Another group of cases (also reported by Butler et al) comprises 167 operations on 138 patients, all of whom had some evidence of myocardial insufficiency; a majority were hyertensive as well. Of these 138 there were 8 unexpected fatalities, but it is interesting to note that all occurred in the advanced age group (60-85). We may assume that these comprised a fair proportion of thyroid and prostate operations, as well as others requiring acute surgical intervention. The low mortality rate is evidence of the result obtainable in cases given well-managed preoperative care.

ANGINA PECTORIS AND CORONARY THROMBOSIS

This group comprises the most dreaded of all those who are compelled to submit to surgical interference. The conscientious surgeon should here pause. He should exercise the most cautious conservatism. Is the operation one of choice? If so, it has no justification save that the will of the patient may cast the deciding vote. Is it one of necessity? Then can the danger be greatly reduced by appropriate preoperative preparation. Where coronary disease is known to exist, the risk can be materially lessened; if there has been a definite history of thrombosis, delay should be advised at all hazards (consistent with safety) until convalescence is fairly established. On the other hand, an operation may precipitate a coronary attack in one in whom such an accident was not anticipated and could not have been foreseen. In the latter case the mortality is very high indeed.

We may, for the sake of argument, class the angina pectoris patients separately, although it must be admitted that all are potential (or perhaps actual) coronary cases; the distinction at best is purely a clinical one. Willius finds that 63.3% of all cases of angina pectoris (as observed at the Mayo Clinic) have a normal electrocardiographic reading. It is obvious, therefore, that these cases present diagnostic difficulties—the more reason for exercising care in eliciting by a careful history any clue that may have a bearing on the subject. Given adequate preoperative attention, many a case of known coronary thrombosis or of symptomatic angina pectoris, will withstand even a severe surgical attack.

HYPERTENSION

The medical as well as the lay public have placed altogether too great stress on blood pressure readings; as a consequence it becomes a task of some magnitude to disabuse those whose rule of thumb—100 plus age—has been their yardstick, of the positivism with which they surround their misinformation. Blood pressure readings are helpful, but only their proper interpretation relative to the individual gives them a value. Butler et al report on a series of 177 operations on patients whose blood pressure ranged over 160 mm systolic (in 5 cases the pressure was between 260 and 280), and of these there were but 12 (7.3%) unexpected fatalities. The mortality was only slightly less in a group having pressures below 160 mm. They rightly infer that the height of blood pressure has little influence on the mortality

rate—even those with very high readings proving, in general, good surgical risks. That the character of operation and many other factors enter into such an analysis, besides mere height of systolic reading, is obvious and should be stressed; but where other things are equal it would seem that hypertension alone should not be a deterring factor where the question of surgical necessity arises.

HEART IN PREGNANCY

Heart disease may, and frequently does, act as a serious complication in pregnancy. It is a menace at all stages—incuding the puerperium. To arrive at a standard of action demands an enormous, well controlled experience. Pardee (Am. J. Obst. & Gyn. P. 255, 1929) has made a study of the functional capacity of the heart as a basis for a classification used in the New York Lying-In Hospital. While such a classification has a distinct value, its conclusions are in part vitiated by the many unknown quantities—such as the severity and duration of labor, and possible complications. Thus, a heart classed as in a relatively safe grade may be thrust into the most dangerous group if the labor prove very severe or prolonged; and per contra—an easy labor may leave unscathed a seriously damaged heart that has given the accoucheur many misgivings.

Hamilton and Carr (Am. J. Obst. & Gyn. Dec. 1933) made an exhaustive study of 500 cardiac cases in the heart clinic of the Boston Lying-In Hospital. Of these 500, 94.4% were of rheumatic origin, and of these 98% were mitral stenoses. Congestive heart failure and auricular fibrillation proved the most dangerous and most common complications. Emphasis is made by these authors on the desirability of giving immediate attention to any even slight symptoms of cardiac distress—such as basal rales, cough, or shortness of breath. Many congestive failures result from clear over-exertion, or from an intercurrent disease—such as grippe. At the slightest suggestion of such, the patient is to be put to bed and kept there—preferably hospitalized—until entirely recovered. The importance of enforcing this rule cannot be over-emphasized. These authors also advocate Caesarean section (100 of their 500 were thus delivered) in cases thought by the internist to be bad prospects for prolonged labor, and in those who were definitely in cardiac failure. Where section is done, sterilization is also performed wherever consent can be obtained, thus safeguarding the patient for all future time.

The Sloane Hospital for Women has collected data covering its heart cases, and has found its percentage of cardiacs (95.4%) to be almost identical with that of the Boston Lying-In hospital; and this holds good for the types of lesion as well. Here too it is emphasized that absolute rest will transform many a doubtful cardiac into a safe risk for delivery at or near term. My own experience with these cases in pregnancy and delivery has convinced me that even many of those of very severe grade respond gratifyingly, provided they are not already badly decompensated. *The main object of antepartum cardiac observation should be to prevent the pregnant patient, who has a mild and compensated heart, from falling into the group of the severely decompensated.*

The question may be asked: upon what criteria shall one rely in giving an opinion of a diseased heart's ability to withstand surgery? Let me answer this first by some generalizations, and then by a few specific remarks. The generalizations suggest the following queries:

(1) Is the operation one of necessity, and, if so, is that necessity immediate? If yes, then there follows a demand for the use of good judgment in the type of operation and selection of anesthetic and anesthetist, irrespective of the character of heart disability; as speedy work as possible; and a fervent prayer that all may go well.

(2) Is the patient suffering from cardiac decompensation, while there is need—but not immediate—of an operation? If so, rest should be enjoined and every effort made to observe such a patient until the unsafe or dangerous period has been replaced by a safe interval. Further delay can then be only harmful.

(3) How shall we prepare and protect the patient who has a dangerous but well compensated heart lesion, when the demand for a serious operation must be met? Perhaps

I can best answer this by citing, as an example, a recent happening— that of two patients who had to submit to prostatectomy one, the younger, middle aged, having a fairly well compensated heart but having had evidences of myocardosis; the other, a much older man, with very definite coronary disease of considerable duration which had caused much disability. Both underwent operation on an oppressively hot summer day. The younger was given very little preoperative care; the older, on the other hand, had prolonged preoperative attention. Result? The younger died unexpectedly, soon after the operation, of acute heart failure; the older made a complete and permanent recovery. Further comment is unnecessary.

I have thus far given you generalizations, but let me now define, briefly but more specifically, what is meant by preoperative advice. The question may be asked: *What are the signs or symptoms which point to danger ahead?* Of these the prominent complaints are breathlessness, easy fatigue, palpitation, nocturnal dyspnoea, substernal or epigastric distress with exertion or after meals; objectively, edema, cyanosis, edema of the lungs, fibrillation, etc.

How does one prepare such patients, besides the "rest and observation" mentioned? By rest I mean complete and absolute rest in bed, and quiet. These are as important before operation as afterward. There should be no rush of friends, no family or business problems unsettled. If any infection, especially respiratory, is present, the operation should be postponed. Torrid, humid weather is poorly borne by cardiacs. If there is congestion of lungs or edema, digitalization; if needed, diuretics should be well tried before operation. In case of fibrillation, digitalis usually is given; in other selected cases of fibrillation, flutter, or paroxysmal tachycardia, quinidine may be indicated. The proper use of nitrites with opiates preoperatively may be a great benefit to the apprehensive anginal patient.

What anesthetic? This the experienced anesthetist must decide. I might mention, however, that it is wise to avoid much adrenalin—as is used with novocain in local anesthesia—in cases with angina or coronary disease. Also to avoid asphyxial-like action of nitrous oxide (raises the blood pressure) in hypertensive heart disease.

After operation one also should not overburden the weak heart by generous intravenous clysis, that is, to increase too suddenly the circulating blood volume, but rather give several small concentrated glucose clyses, if needed.

The time limitation put upon this presentation necessarily places a check on any more detailed suggestions for the preoperative management and preparation of the cardiac patient, but these few practical considerations may indicate in what manner the physician can offer helpful advice to the surgeon in the care of many cardiac-surgical cases. Greater cooperation between these two specialties can result only in good to the patient.

SUMMARY

To recapitulate, then—while one may concede the hazard of valvular disease, chronic myocardial degeneration, hypertension, coronary disease, and pregnancy—operations may be done with relative safety in these cases if only the patient be granted the preoperative consideration to which he is entitled.

The group studies I have quoted above indicate splendidly coordinated work, but this ideally efficient scheme is confessedly not so easily carried out in the average private hospital. However, the aid of competent and adequate preliminary examination and care is or should always be available, and no surgeon should assume the responsibility attendant upon a major operation without having given careful heed to the state of health of his patient. This is not an idle, superfluous remark; every honest surgeon has witnessed the tragedy of failure to heed this admonition. There need be and there should be fewer postoperative cardiac deaths: the patient puts his life in the surgeon's hands; that confidence should be respected. *An avoidable postoperative fatality cannot stamp any operation a success, however brilliantly conceived and executed.*

'Tis said that fools rush in where angels fear to tread. Nowhere is this more applicable than as it pertains to the surgeon

whose interest and concern are his patient—not primarily the operative procedure. I would therefore make a plea for greater cooperation between surgeon and physician. Medical treatment of a failing heart may convert a poor surgical risk into a relatively good one. Certainly, danger lurks where haste is used.

DISCUSSION

Dr. H. Hendrickson (Green Bay): It is not my intention or desire to infringe on anything that has gone before this morning, but I wish to add a mite of experience to it. There is one group of heart cases that confronts the surgeon and at times causes him a lot of anxiety. I refer to the considerable number of myocardial disturbances due to toxic goitre.

The case that I present this morning is not unusual but fortunately the frequency is decreasing because of better diagnosis and treatment. This patient cannot be presented for a good and sufficient reason.

I was called to this woman's home on February 2, 1933, to see a case of heart disease. At that time, she was forty-two years old and in appearance was healthy. Her past history was negative except that she had borne two children and was always nervous and high strung. Her home life was cheerful and peaceful. About her only complaints were her extreme nervousness, insomnia, and cardiac distress of about five years' duration.

Physical examination at the time showed an apparently healthy woman forty-two years old with an estimated weight of 150 pounds. Head, throat, and teeth were negative. Examination of the neck showed a moderate, diffuse enlargement of thyroid. Lungs negative. Heart rate ranging from 104 to 120, very irregular. No murmurs, moderately enlarged to the right. Abdomen and pelvis negative. Blood pressure, systolic 165; diastolic 90.

She had a marked tremor. There was no exophthalmos. The most prominent lesion present was her chronic myocarditis.

I advised her to go to the hospital for further examination, but she did not enter the hospital until March 23rd, almost two months later. Laboratory findings in the hospital were as follows:

Blood examination:

Hemoglobin	80%
Red Count	3,600,000
White Count	7,000
Polys	78%
Lympocytes	16%
Neutrophils	6%

Urine analysis normal except for a few pus cells.

Metabolism Test: + 75

Diagnosis: Toxic goitre, operation advised and consented to.

She was on full diet, Lugol's solution 15 minims after each meal. Phenobarbital at night for sleep. On April 17th, the metabolic rate was plus 29. On April 17th, twenty days after admission, thyroidectomy was performed. Anesthetic of ethylene was preceded the evening before with three grains (3 grs.) of sodium amytal and six grains (6 grs.) 1½ hours before operation with morphine one-fourth grain (¼ gr.), atropin 1/150 grain.

Postoperative course was rather stormy for three days, but Lugol's solution as high as 40 m qid, morphine and ice bags controlled the situation.

Her temperature ranged from 97 to 101.6. Pulse varied from 126 to 88. She was dismissed on April 23, six days after operation, apparently perfectly well. Heart regular, rate 84, no tremor and no complaints.

Following her recovery from the operation, she lived a normal, healthy life, did all her housework, slept well, gained weight and had no cardiac distress, and, as she stated, she never felt better in all her life. However, on the morning of Saturday December 17, 1934, she got up, prepared breakfast and did her usual early morning work preparatory to her Saturday house cleaning. She then started to pick up the rugs and fell over dead.

This case is presented to you to demonstrate the permanent damage that is done to the myocardium in a long standing neglected toxic goitre.

Prostatic Resection*

By HERMAN L. KRETSCHMER, M. D.

Chicago

IT IS not necessary to review before this section the history of the development of the present day treatment of obstruction at the neck of the bladder, since, no doubt, you are familiar with this phase of the subject. However, may I call your attention to the present trend in the treatment of prostatic obstruction, a trend that is away from open surgery, and constitutes another milestone in the general course departing from open surgery in the treatment of various urological conditions.

With the development of modern urology and modern urological methods of diagnosis, a new chapter has been written, and because

* Read at the 93rd Anniversary meeting of the State Medical Society of Wisconsin, Green Bay, September 12, 1934.

of the various innovations I desire to call your attention to some of the outstanding developments.

1. *The treatment of acute renal infection by means of ureteral catheter.* It is not so many years ago that many of these acute renal infections were treated by means of open surgery, either by nephrostomy or pyelotomy, or, in some instances, by nephrectomy. With a better understanding of acute renal infections, practically all these patients today are treated by the ureteral catheter, thus avoiding surgery.

2. *The treatment of stone in the ureter.* At the present time, stones in the ureter are treated, with few exceptions, by ureteral manipulation. By this method attempts are made to dislodge the stone with the catheter, to dilate the ureter below the stone and inject sterile oil.

3. *The treatment of stricture of the ureter.* In a gratifying number of these cases, treatment by the dilatation of the structure with the ureteral bougie is effective, although it must be admitted that in some cases it is necessary to resort to open surgery.

4. *The treatment of benign papillomata.* One of the outstanding methods of treatment that has completely replaced surgery is the treatment of benign papillomata of the bladder by fulguration through the cystoscope.

5. *The treatment of bladder-neck obstructions.* Non-surgical treatment in bladder-neck obstructions by means of transurethral surgery, as instanced by punches, such as the cold punch of Young, the hot punch of Caulk, the Bumpus–Braasch method, and the use of the Stern–McCarthy resectoscope.

I wish to present at this time my experiences in the treatment of bladder-neck obstruction by means of transurethral electric resection. This paper is based upon a series of 503 resections.

No. of Resections	503
No. of Cases	452
Multiple Resections	51 (10.%)

In some of the cases a second resection was necessary because of failure to remove enough tissue. When the lateral and middle lobes were very large, the resection planned was a two-stage resection. This was explained to the patient. In some of the cases of carcinoma of the prostate, a second resection was necessary because of recurrence of the carcinoma.

The youngest patient upon whom a resection was performed was thirty years of age and the oldest was eighty-nine. A review of the age incidence is given in the following table:

AGE

30–40 years	3 cases
40–50 years	9 cases
50–60 years	86 cases
60–70 years	232 cases
70–80 years	102 cases
80–90 years	20 cases
Total	452 cases

The presence of residual urine is one of the common findings in cases of bladder-neck obstruction. The amount varies in every case and may vary from day to day in the same patient.

The following table gives the number of cases and amounts of residual urine over 250 cc. up to complete retention.

RESIDUAL URINE

Complete Retention	97 cases
500–1000 cc.	34 cases
250– 500 cc.	52 cases

In a large number of cases some form of infection of the urinary tract occurs, sooner or later, that requires preoperative treatment.

In this series of cases bacteriologic study of the urine showed the following:

INFECTION

B. Coli	144 cases
Staphylococcus albus	116 cases
Streptococcus hemolyticus	14 cases
Staphylococcus hemolyticus	7 cases
B. Coli hemolyticus	6 cases
B. Proteus	11 cases
B. Pyocyaneus	2 cases
Eberthella	1 case
	301 cases (64.5%)

As a result of obstruction at the vesical orifice there develops, sooner or later, definite damage to the bladder and upper urinary tract with resulting stasis which predisposes to infection. Hence, before resec-

tion is done, a complete and careful survey of the entire urinary tract in each case is of great importance.

In the following table the incidence of associated findings is given:

ASSOCIATED GENITO-URINARY PATHOLOGY

Diverticula of the bladder	62 cases
Bladder calculi	19 cases
Carcinoma of the bladder	18 cases
Prostatic calculi	14 cases
Renal calculi	12 cases
Ureteral calculi	5 cases
Solitary kidney	2 cases
Papillomata of the bladder	4 cases

ASSOCIATED GENERAL CONDITIONS

The importance of a complete physical examination in the prostatic patient has been stressed a great many times. It is a well-recognized fact that the prostatic patient may suffer from lesions in other important organs coincidently with his prostatic pathology. One of the results in going over the associated general pathology has been the discovery that a large number of patients in this group were suffering from cardiovascular disease. As a matter of fact about 57 per cent of the cases in this series had some sort of cardiovascular pathology.

The following table shows the incidence of associated organic lesions found in this series.

CARDIOVASCULAR SYSTEM

Myocarditis	181 cases
Coronary disease	28 cases
Angina pectoris	11 cases
Hypertension	70 cases
	290 cases (57.6%)

ASSOCIATED GENERAL PATHOLOGY

Diabetes	18 cases
Syphilis	10 cases
Cord bladder	6 cases
Pulmonary embolism	2 cases
Bronchial asthma	2 cases
Cerebral thrombosis	2 cases
Carcinoma of stomach and liver	2 cases
Buerger's disease	1 case
Hemiplegia	1 case
Manic depressive psychosis	1 case
Paralysis agitans	1 case
Duodenal ulcer	1 case
Polycythemia vera with erythromelalgia	1 case

PREPARATION OF PATIENTS

In patients with infection it is desirable, as a matter of fact it is imperative, that the infection be treated and controlled, as far as possible, before any sort of operative procedure is instituted. This procedure is just as important when a resection is contemplated as it is in case a prostatectomy is planned. Among the various factors which have contributed in lowering the surgical mortality has been the recognition of the importance of treating infections before operation. This fact cannot be too forcibly emphasized.

The following table shows the method of preparation which was employed in this series:

Indwelling catheter	218 cases
Suprapubic cystostomy	34 cases
Massage and irrigations	56 cases
No preparation	144 cases
	452 cases

It is a well known fact that all cases cannot be prepared in the same way. In this series there were 34 patients who had had a previous suprapubic drainage. In cases that cannot be prepared by the indwelling catheter, or in which, for one reason or another, it is desirable to perform a suprapubic cystostomy, this operation was done unhesitatingly.

These patients naturally fall into three groups. Group 1. Patients with severe infection which could not be controlled by indwelling catheter drainage, or in whom the indwelling catheter produced severe local pain, profuse urethral discharge, or systemic reaction in the form of chills and fever, were prepared by suprapubic cystostomy.

Group 2. In most of the cases in which there were stones in the bladder associated with the prostatic obstruction we were able to do a stone crushing first and a few days later carry out the resection. However, in some of the cases in which the stones were very large and the infection very severe a suprapubic cystostomy was done.

Group 3. In this group were patients in whom, because of severe heart lesions and because of failure of other methods of prep-

aration, it was deemed best to do a suprapubic cystostomy. Some of these patients, who had carcinoma of the prostate and had had a previous suprapubic cystostomy for permanent drainage, were successfully resected and the fistulae healed.

CASES PREPARED BY SUPRAPUBIC CYSTOSTOMY

Severe infection	14 cases
Large bladder calculi	7 cases
Various other reasons (heart lesions, carcinoma, inoperable)	13 cases
	34 cases

One of the advantages claimed for this new form of treatment is based upon the fact that the postoperative stay in the hospital following resection is much shorter than the postoperative stay following a prostatectomy. It is true that in some of the cases of perineal and suprapubic prostatectomy patients can leave the hospital in about two weeks. However, a close examination of the cases reported by various authors indicates that the stay in the hospital after a prostatectomy is about fifty days. In these days of economic stress a method of procedure that shortens the period of hospitalization has undoubted advantages. It should be added that no attempt has been made in the series here reported to hasten the recovery of patients. It goes without saying that patients who have been prepared by means of a suprapubic cystostomy remain in the hospital a longer time than those who have had resections without the preliminary operation. Moreover, in cases with small bars and small middle lobes without infection the period of time in the hospital is short—in some of our cases it amounted to only forty-eight hours. The average period in this series was 9.1 days. The shortest 2 days.

A matter that should be emphasized is the fact that the temperature reactions are of shorter duration than in a similar group of patients treated with open surgery. The average duration in this series was 2.4 days.

An analysis of the temperature reactions is given in the following table:

99°–100°	101 resections
100°–101°	178 resections
101°–102°	97 resections
102°–103°	45 resections
103°–104°	36 resections
104°–105°	3 resections
No temperature	43 resections
	503 resections

HEMORRHAGE

Bleeding.—Immediate postoperative bleeding is generally of minor importance, the amount being dependent on the care that was exercised in the control of bleeding at the time of the resection. In my opinion the time to control the bleeding is in the operating room while the resection is being done. We try to send the patient back to the room with little or no bleeding and this is easy of accomplishment, experience and patience being essential.

Secondary Hemorrhage.—A small number of patients passed gross blood in the urine from ten to twenty days after the resection. No doubt, in this group of cases, the bleeding was due to infection. The bleeding promptly stopped when the clots were evacuated with a Bigelow pump and the bladder was irrigated with a warm solution of potassium permanganate in the strength of 1:5000, or a warm solution of silver nitrate in the strength of 1:5000. In the cases in which the bleeding continued after the above mentioned procedure, the resectoscope was introduced into the bladder, and the bleeding points were localized and fulgurated with a high frequency spark. In a few instances the bleeding areas were excised.

There were six cases of late secondary bleeding. In this group the bleeding occurred one year after the resection. It was never very severe and, in most instances, stopped spontaneously. In one case it was necessary to resect the bleeding points.

The following table gives the number of cases in which bleeding occurred:

POSTOPERATIVE HEMORRHAGE

Primary	2 cases
Secondary	9 cases
Late secondary	6 cases
	17 cases

POSTOPERATIVE COMPLICATIONS

A small number of general complications followed the use of the resectoscope. The following are the postoperative complications:

Pyelonephritis	71 cases
Singultus	6 cases
Phlebitis	3 cases
Bronchopneumonia	2 cases
Psychosis	2 cases
Pulmonary embolism	1 case
Cerebral thrombosis	1 case
Parotitis	1 case
Mesenteric thrombosis	1 case
Periprostatic abscess	1 case
Abscess of prostate	1 case
Septicemia and phlebitis	1 case
	91 cases

At the present time a vasectomy is done in every case where it is possible to obtain permission for the operation. Since doing this in the majority of cases, there have been no further complications of this type.

In this series of 503 resections there were 16 deaths, a mortality of 3.1 per cent.

DISCUSSION

Dr. W. J. Carson (Milwaukee): Perineal section was first performed by the ancient Hindus for vesical neck obstruction. Hippocrates cut for stone. In the 16th century Nicolo Ulassa, a Venetian physician, described the prostate gland.

Methods of treating prostatic obstruction up to the 18th century consisted for the most part of tunneling through the gland, which was practiced by Parre, John Hunter, Chopart, Billroth and others. Suprapubic cystotomy was performed by Pierre Franco in 1556.

Covillard, in 1639, performed perineal prostatectomy; Sir William Fergueson in 1849; Billroth in 1867; Gouley in 1873 advocated complete perineal prostatectomy, which was first done by Goodfellow in 1891. F. M. Watson of Boston in 1889 was the first to perform perineal prostatectomy in America. W. N. Wishard in 1890 combined perineal and suprapubic prostatectomy. The contributions of Lister mark the beginning of modern surgery of the prostate the principles being adopted by Belfield, who, in 1890, collected 133 cases with a mortality of: perineal 9.7%, suprapubic 13.6%.

Valuable contributions to perineal prostatectomy have been made by Samuel Alexander in 1896, Parker Syms in 1899, Alexander B. Johnson in 1900, Hugh Young in 1903, J. T. Geraghty in 1922 and others.

VonDittel, in 1885, resected a part of a large middle lobe from above, resulting in death of the patient. Belfield, in 1886, and McGill, in 1887, successfully removed median lobes. Removal of lateral and median lobes through a suprapubic incision was first practiced by Fuller in 1895, Guiteras in 1900 and Freyer in 1902.

Ambrose Parre, in 1575, described an instrument which he used to remove pieces of the prostatic gland. Mercier, in 1809, designed another instrument for the same purpose. Modern transurethral prostatectomy has been developed by Guthrie, Home, Henry Thompson, Charles Bell, Mercier, Albarron, Guyon and Civiole. In 1874 Bottini first used the galvanocautery for removal of prostatic tissue. Freudenberg in 1897 modified the Bottini instrument. Chetwood, Wishard, Young, Caulk, McCarthy, Braasch, Collings and others have designed instruments.

Surgical diseases of vesical neck obstruction include: (1) Median bars, which includes the sclerosis, fibrosis and contractures, Guthrie of England, 1834. (2) Commissural hypertrophies, those lesions where hypertrophic changes occur in the dorsal commissure; these are intracapsular, as solitary growth or with lateral lobe hypertrophy. Sir Everard Home—1813. (3) Subcervical hypertrophies, generally called enlargement of Albarran's gland. (4) Benign tumors of the prostate. (5) Malignant tumors of prostate. (6) Calculi in prostate. (7) Neurogenic. (8) Acute infections.

Indications for transurethral prostatectomy are: (1) Median bars. (2) Early, small median lobe hypertrophy. (3) Fibrosis following prostatectomy. (4) Carcinoma with metastasis. (5) Atrophic fibrous prostate.

Indications for transvesical prostatectomy are: (1) Large lateral lobes. (2) Large median lobe. (3) Previous suprapubic cystotomy for drainage. (4) Vesical diverticuli. (5) Large vesical calculi. (6) Median bars.

Indications for perineal operation are: (1) Abscess. (2) Lateral lobe hypertrophy. (3) Atrophic fibrous prostate. (4) Carcinoma without metastasis. (5) Prostatic calculi. (6) Tuberculosis. (7) Seminal vesiculotomy. (8) Seminal vesiculectomy. (9) Urethral stricture with perineal fistula. (10) Recto-urethral fistula.

I wish to report one hundred consecutive cases, varying in age from 36 to 88 years, operated upon in eleven different hospitals without a surgical death by the following methods: (1) Transurethral 12; (2) Transvesical 78, 70 in 2 stage; (3) Perineal 8; (4) Radical perineal 2.

One died from coronary obstruction four weeks after operation; postoperative hemorrhage 3; incision hernia 1; general carcinomatosis within five years 5; cholecystitis requiring cholecystectomy 1; hypertrophy of breasts 1; hyperthyroidism within one year 4; 2 requiring sub-total thyroidectomy.

There is probably a geographical distribution of prostatic hyperplasia as there is of thyroid hyperplasia. Their relation to internal secretion and the sympathetic nervous system, offers an excellent field for clinical research.

Common Infections of the Urinary Tract and Their Treatment*

By JAMES C. SARGENT, M. D.
Milwaukee

GONORRHEA and tuberculosis are comparatively common forms of urinary tract infection. Each conforms in some degree to those features characterizing the non-specific infections, but each is sufficiently peculiar in its own right to warrant exclusion from this more generalized discussion.

The whole subject of non-specific infection of the urinary tract has been confused to a considerable degree through our efforts at more exact description and more careful classification of disease. Chills and fever associated with pyuria have come to mean pyelitis—pyelitis of pregnancy if in a pregnant woman; pyelitis of infancy if in a child. The more prosaic picture of bladder irritation and pyuria is commonly termed cystitis. If our patient is a man complaining only of urethral discharge, it becomes non-specific urethritis. If there is perineal distress and slowing of the urinary stream associated with swelling and tenderness of the prostate, it becomes prostatitis.

As a matter of fact, if one considers only the non-specific infections, these various diseases as separate and distinct entities do not exist and in those patients whose infection is not too fleeting to permit a careful study, it is easy to demonstrate that involvement is complete throughout the entire tract. Urethritis, prostatitis, cystitis, pyelitis, and even pyelo-nephritis, when non-specific, are but varying types of one and the same situation. When the picture of pyelitis develops, it is an indication that some mechanical obstruction or an unusual edema of one or both ureters is interfering with free drainage from the kidney cavity. Toxic substances, dammed back under pressure within so vascular a structure are rapidly absorbed and chills and fever then dominate the picture. In other patients in whom the urine drains freely from the renal pelves, chills, fever, and renal pain are absent, leaving the burning and frequency of an inflamed bladder as the predominant symptoms. Or if perchance both renal and bladder symptoms are mild, urethral irritation and discharge alone may symptomatize the infection.

It is interesting to note that infections of the respiratory tract and infections of the urinary tract have considerable in common. Except in very mild cases, whenever an acute infection develops in the respiratory tract, it spreads from one end to the other, whether it begins as a rhinitis or as a tracheobronchitis. While most urinary tract infections are blood-borne and spread from above downward, when infection does enter from below, it travels upward with much the same ease and certainty. Respiratory infections and urinary infections both have a certain strong tendency to run a short course and pass on even without treatment. Chronicity is likely to develop in either situation if one of the sinuses, a dilated bronchus, or a kidney pelvis fails to drain perfectly, or if a foreign body such as a fishbone or a kidney stone defeats the natural powers of healing. Both lungs and kidney are notorious for their rich vascularity and when either are infected and septic matter does not drain away freely, terrific chills and extreme fever announce the unusual rate at which toxic matter is being absorbed.

Despite this remarkable similarity, the urinary tract remains quite unique in one regard. It is constantly bathed in urine; a fluid that may be rendered antiseptic by the direct instillation of drugs and under certain circumstances, by internal medication or even by diet. What is perhaps of even greater practical importance, though the fact is taken advantage of little enough, heaven knows, this fluid remains free from bacterial and cellular elements in normal subjects

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whereas, in disease, their presence gives a wealth of valuable knowledge to those who are inquisitive.

Unfortunately, the ordinary routine urinalysis, while of the utmost value in other kidney diseases, fails miserably in its usefulness when it comes to urinary tract infections. Emphasis is placed so heavily upon the twenty-four-hour specimen, specific gravity, albumin, sugar, and casts that laboratory and clinician alike are prone to overlook the vast information that can be gotten from a bacterial and cellular study of a catheterized specimen of urine examined while fresh and still unchanged.

For one to proceed intelligently in the management of urinary tract infections certain things must be known. By clinical observation and the more simple tests one is usually able to determine whether or not the urinary tract is otherwise perfectly normal. X-rays and cystoscopy must be employed, however, if they are necessary to be certain that foreign bodies, sloughing tumors, or obstructive lesions are not underlying the infection. I know of nothing more futile than wasting time and drugs in an attempt to cure an infection in the presence of some such underlying pathology.

Certain studies of the urine beyond that ordinarily employed in routine urinalysis should be made. It is important to know whether the fresh urine is alkaline or acid in reaction. Under ordinary circumstances, the simple use of litmus paper will suffice, though occasionally a more exact knowledge of the degree of acidity through p_H determination is of great value. It is equally important that the type of invading organism be known. For all ordinary purposes, this is accomplished by a simple methylene blue stain of sediment from the freshly catheterized specimen. When the possibility of either tuberculosis or gonorrhea exists, special differential stains must be employed. Finally, when it comes to the question of complete cure and the discontinuance of treatment, the disappearance of bacteria—not merely the abating of symptoms—is the only dependable criteria. Here, again, the simple stain will ordinarily suffice though actual cultural studies sometimes may be necessary.

TREATMENT

The treatment of these simple infections, while not at all specific and indeed at times quite involved, is after all considerably simplified by the fact that nature herself is a great healer. Unless complicated in some way, cure quite often occurs regardless of what the treatment may be. While this has its practical advantages, it is not an unmixed blessing for it has the effect of lending an entirely unwarranted virtue to certain drugs which have little more to recommend them than the fancy claims of their advertisers.

So far as I know, there is still but one drug that merits being classified as a urinary antiseptic and even its usefulness has very definite limitations. I refer to methenamine, popularly known as urotropine. Its use may be actually harmful if, through error, it is given in tuberculous or gonorrheal infections, and it is quite without effect in the treament of the simple, non-specific infections unless and until the urine has been rendered strongly acid to litmus. While methenamine is ordinarily dispensed in combination with sodium acid phosphate, it is frequently necessary to add substantial, and occasionally enormous, doses of ammonium chloride, benzoic acid, or other similar drugs to acidify the urine properly in order that it may have a chance to be effective. More often than not, simple urinary tract infections are accompanied by a very tenacious alkalinity of the urine and it is not uncommon to have to employ a gram or two of some acidifying drug to make a five grain dose of methenamine effective.

Simple alkaline therapy is time-honored and deserves some mention. Especially in pyelitis of infants and in those cases of adult infections in which septic symptoms predominate and toxemia is profound, some such a drug as potassium citrate frequently gives symptomatic relief. Alkaline thèrapy of this sort, however, must never be confused with the giving of urotropine for its direct antiseptic effect.

The vast majority of non-specific urinary tract infections are caused by bacilli of the colon group. Urotropine, with adequate acidulation of the urine, finds its greatest

field of usefulness in these bacillary infections. Less commonly, staph and other cocci are found responsible for the infection and much less benefit from urotropine therapy may then be expected. To compensate for this, however, the intravenous use of arsenic, much as is employed in the treatment of syphilis, has considerable to offer in these non-bacillary infections. While it is perfectly true that results are not uniformly favorable, often there is real benefit and occasionally startling cures follow with the use of arsphenamine in these non-specific coccal infections.

Before leaving the strictly medical treatment of simple pyelo-cystitis, mention should be made of some very interesting and promising work just now being developed. Many patients, when carried on an almost pure fat diet for a week or so, eliminate ketone bodies in the urine sufficient to produce an acidity considerably greater than that usually possible by drug therapy. Urine with a p_H as low as 5.2 will inhibit bacterial growth and at times actually kill bacteria, especially the common colon bacillus. Whether this is the direct effect of the ketone bodies or the indirect effect of the extreme acidity is undetermined, but there is much to indicate that the procedure, when fully developed, will offer a really worth while aid in the treatment of these common and often bothersome infections.

In the management of the chronic or recurring urinary tract infections, certain adjuncts to medicinal treatment often prove to be of great value. Under such circumstance, it is, of course, imperative that a thorough study of the entire urinary tract be made. Much more often than not, such a survey will disclose a stone, hydronephrosis, ulcerating tumor, bladder diverticulum, prostatic obstruction, or other underlying pathology, the correction of which will be necessary before there can be the slightest chance of curing the infection.

After it has been definitely proven that underlying local pathology does not exist, I believe it is still orthodox to search for some possible focus from which infection may keep migrating to the urinary tract. Usually the correction of dental, tonsil, and gall bladder infection proves futile, but often enough to justify it, spectacular benefit will follow.

There is a fairly common and annoying group of cases of chronic urinary tract infection, of exceedingly low grade, comparatively free from kidney or bladder symptoms and characterized by nothing more than pyuria with mild recurrent spells of urethral distress and discharge. Here, as elsewhere, the rule prevails that infection at one place suggests infection throughout the tract, so that the usual medicinal treatment for pyelocystitis is naturally indicated. In addition, however, some contributing infection of the genital tract is entirely likely and final cure may rest upon prostatic massage or, in the case of women, cauterization and cure of a chronically infected cervix.

Bladder irrigations and instillations have enjoyed a popularity entirely beyond that which they deserve. While it comes perilously close to being so, I do not believe it is correct to say that they are entirely useless. In acute urinary infections where bladder distress is outstanding, some symptomatic relief may follow catheterization with permanganate irrigations or argyrol instillations. I can conceive of nothing more illogical, however, than attempting to cure an infection that extends from kidney tubules to the end of the urethra by direct medication of the bladder cavity alone. Whatever benefit the bladder may enjoy is but momentary because fresh hordes of bacteria keep pouring constantly from above. It is perfectly true that certain cases of unusually persistent or recurring infections can be greatly benefited or completely cured only by direct antiseptic medication. Bladder lavage does not then suffice, however. Ureteral catheters must be passed and medicine injected directly into both renal pelves where, washing down stream, it has a chance to bathe and benefit the entire urinary tract.

GENERAL SEPSIS

Much that has gone before has had to do with the more benign urinary tract infections, both acute and chronic, in which symptoms are largely local. Mingled among them, however, one is at times confronted by the more alarming cases in which the general

symptoms of sepsis completely dominate the picture. When hard chills, high fever, and extreme prostration occur, one may be certain that some factor other than infection is present. That factor just as certainly is inadequate drainage of the infected urine from one or both kidney pelves. We see it in the prostatic whose bladder and upper urinary tract is filled with residual urine. We see it in pregnancy where pressure of the expanding uterus upon the lower ureters results in the same sort of upper urinary tract stasis. We see it in chronic hydronephrosis where one or both kidneys is distended with retained urine. We see it in patients in whom an impacted stone has completely occluded one ureter. And we see it in persons whose anatomy is essentially normal but in whom an uncommon amount of inflammation and edema has swollen one or both ureters shut.

Certainly there is every reason for the same medical treatment here as in those more simple cases in which profound toxemia has not occurred. Perhaps alkaline therapy may even be better while fever runs so high. Something more must be done, however, if one would give prompt and lasting relief from these alarming symptoms. Free drainage must be reestablished. A simple indwelling bladder catheter is always worth trying. Naturally, if improper bladder drainage has been due to a sagging cystocele or to a large prostate this will work wonders. Even in those patients who void with perfect freedom this simple expedient, by keeping the bladder constantly empty, seems to facilitate more perfect drainage from above. Surgical pituitrin given intramuscularly will drop a fever often enough to warrant giving it a trial. Doubtless the benefit that it exerts comes from its stimulation of ureteral peristalsis with better emptying of the kidney pelvis.

Through these more simple means it is often possible to tide a patient over the worst of these alarming symptoms. When toxemia remains profound in spite of them, however, more direct methods of establishing free kidney drainage must be employed. Ureteral catheters, passed to each renal pelvis through the cystoscope and left indwelling for several days, almost without exception bring instant and lasting relief. When such a procedure seems indicated, one should not hesitate because of tender or of advanced years; or because of profound exhaustion or of pregnancy. After all, the procedure is both simple and safe and it can be relied upon to bring a relief beyond the description of words to patient and doctor alike.

Genitourinary Tuberculosis*

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OUR present opinions concerning tuberculosis of the genitourinary tract differ somewhat from that of fifteen years ago and from statements found in our modern texts. This change in opinion and ideas has come about gradually and followed more careful clinical and pathological studies of this disease. The modern conception of genitourinary tuberculosis, in our opinion, dates from the publication of Dr. E. M. Medlar's[1] excellent paper in 1926. Much of his research and study was done while he was a member of the Department of Pathology of the University of Wisconsin. His very careful and convincing experimental and pathological studies on this subject stimulated a more intense clinical interest in this problem. The application of his findings to the field of urological diagnosis and treatment has added much to our clinical knowledge of the origin, development and proper handling of lesions of genitourinary tuberculosis.

Although this State Society has progressed far enough in size and scientific endeavor to divide its session into sections of specialties, I hope that the majority of my listeners are

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general practitioners. The urologist depends upon his colleagues in general practice for his opportunity to study genitourinary tuberculosis. However, patients referred to him very infrequently have the early lesions of this disease. The majority of these referred patients have kidneys that are partially or wholly destroyed, and urinary bladders which are extensively involved or permanently crippled.

ROUTE OF INFECTION

Tuberculosis is a constitutional disease with local manifestations in various organs and tissues. Tubercle bacilli enter the human body through the respiratory or digestive system, and establish a primary focus from which they may gain access to the blood stream. A suppurating gland may communicate with a small blood vessel or tubercle bacilli may be picked up by the lymphatic system and pass into the subclavian vein via the thoracic duct. Since the hematogenous route is the avenue through which spread of infection from the thorax occurs, it is easy to see why any and all organs or tissues of the human body may be the stopping place for emboli containing tubercle bacilli. The development of secondary foci of disease from these infectious emboli depends upon many factors, such as the number of bacilli present, their virulence, the resistance of the host, the presence or absence of local injury, etc.

Tuberculous infection of the urinary tract is always a secondary and never a primary lesion. Hematogenous tuberculous infection of any organ of the genitourinary system may occur as an original secondary lesion from a primary focus in the thorax: however, there is much clinical evidence that a considerable number of lesions develop as tertiary ones from a secondary tuberculous focus in the kidney. The kidneys should be the most frequently involved organs of the urinary system because with their exceedingly large blood supply and large capillary bed, it is only natural that bacteria and emboli should frequently reach and become lodged in their parenchyma. Likewise, when bacteria are free in the blood stream, or trapped in circulating cells in any number, it is very difficult to conceive why all of them should become localized in one kidney and not in its mate. Much clinical evidence has been presented substantiating the contention that bilateral renal tuberculous infection usually occurs. We suggest that every patient who suffers from pulmonary tuberculosis, or extrapulmonary spread, should be suspected of and carefully studied for evidence of this infection in the genitourinary system.

SYMPTOMS AND CLINICAL EVIDENCE

Tuberculosis in the urinary tract, like tuberculosis in the lungs, the spine and other organs of the body, is a symptomless process in its early stages. It is therefore desirable to search for these early lesions, rather than wait for them to eventually present clinical evidence of their presence. If the diagnosis of pulmonary tuberculosis were delayed until secondary lesions developed in the larynx, we would rarely, if ever, discover the pulmonary lesions before they had reached an advanced stage. Pain, hoarseness, or aphonia produced by a lesion of tuberculosis in the larynx are no longer considered symptoms of pulmonary infection; yet frequency, urgency and dysuria, comparable symptoms, are still considered by the general practitioner to be early signs of renal tuberculosis. The latter symptoms should not be fixed in the minds of physicians as the first ones noticed by the patient having renal infection. These symptoms are those of cystitis or inflammation of the bladder a secondary lesion which has a primary focus elsewhere in the genitourinary tract. The general practitioner should think in terms of earlier lesions and should be taught to scrutinize carefully any patient with tuberculosis or other disease of an obscure origin who presents abnormal urinary findings of a cellular type. One attack of painless hematuria, unexplained pyuria or cystitis, intermittant or continuous, may all be symptoms of renal tuberculosis. All these patients should be subjected to a thorough urological study to determine the cause of their urinary abnormality. Tubercle bacilli are present in the urine in small numbers in the earlier renal lesions and are rarely demonstrable by smear alone. Cultures or

guinea pig inoculations are usually required to find them. They may be present intermittently and repeated examinations may be necessary before they can be demonstrated. The isolation of tubercle bacilli from the catheterized ureteral specimen of urine from a kidney means renal tuberculosis. Excretory bacilluria does not occur.

TYPES AND PATHOLOGY

Tuberculous infection of the kidney is not different in its development and does not produce a different tissue reaction than in other organs. Clinically and with the aid of the pyelogram we are able to recognize two types of lesions: non-destructive and destructive. The non-destructive type is manifested by hematogenous areas of tuberculous infection within and next to the tiny blood vessels in the kidney parenchyma. When local and general resistance is good, these inflammatory areas may be arrested and healing may occur before many tissue changes develop and certainly before destruction of tissue results. They are usually bilateral in the kidney and arrest and healing may occur before symptoms or findings in the urinary tract are noticeable to the patient or the physician. A few pus cells in the urine may go unnoticed. Tubercle bacilli and cellular elements may be expelled in the urine without frequency of urination or other symptoms and they may be present at one time and not at another. This intermittent excretion of tubercle bacilli may be very puzzling to observers who do not understand the pathological process present. This condition in the kidney is comparable in many ways to early pulmonary tuberculosis which may be present before sputum becomes positive, or before bacilli appear in sufficient numbers in the sputum to be isolated. These hematogenous inflammatory renal lesions produce no filling defect in the pyelogram. Experimentally, Medlar[2] finds 75 to 80 per cent of them occur in the cortical area because here in the blood vessels are more numerous and are smaller. Twenty per cent are found in the cortico-medullary and 5 per cent in the medullary area. This areal division of lesions is directly related to the number and size of blood vessels.

The *destructive type of lesion* can only be recognized clinically be a well-filled retrograde pyelogram which will visualize any deformity of the kidney pelvis and its parenchyma. The destructive lesions may be divided into three groups: ulcerative, parenchymal abscess, and tuberculous pyonephrosis. The ulcerative, or the least destructive of these lesions, appears in the pyelogram as a small, motheaten area or irregularity in the tip of a calyx and projects slightly, if any, into the parenchyma. The filling defect may be slight so that the diagnosis depends on the constant appearance of this on repeated retrograde pyelograms and the presence of pus cells and tubercle bacilli in the urine.

The second clinical group of destructive lesions which we find in the kidney is the parenchymal abscess (which has been incorrectly called cortical abscess). Here more destruction of tissue has occurred which may be recognized in the pyelogram as a distinct filling defect, or accessory pocket which projects from the tip or end of a calyx into the parenchyma of the kidney. Depending upon their size and the local efforts at healing, these lesions may not produce urinary symptoms. They may be multiple and the destruction of tissue may progress rapidly to pyonephrosis and eventually to complete destruction of the kidney. The local and general defense mechanism, however, may be sufficient to hold an area of this type in check for years. Abscesses the size of a half dollar may eventually be surrounded by connective tissue so that they do not communicate with the calyces or the pelvis, temporarily at least, preventing tubercle bacilli and pus cells from reaching the urine from this source. We have never seen one of these phthisical areas completely healed, but we have observed one that was held in abeyance and did not progress for thirteen years, and we have seen others that have remained quiescent for shorter periods of time.

Tuberculous pyonephrosis is the third group of destructive renal lesions which we recognize. It is the terminal stage of infection of the kidney with the tubercle bacillus and consists of extensive, multiple, parenchymal abscesses, associated with wide-

spread tuberculosis of the pelvis of the kidney. This condition is really the end product of the previous lesions which have been described and usually is the result of unrecognized, untreated renal tuberculosis extending over a considerable period of time, or occurring in a patient who has little or no resistance against the infection. Here again the pyelogram may be required before a diagnosis of this condition may be made but often the destruction of the kidney is so great that its use may not be necessary.

SPREAD OF INFECTION

Mildly destructive or destructive lesions in the kidney that produce a parenchymal abscess, constantly pass cellular elements and tubercle bacilli into the urine during their period of communication with the renal pelvis.

The spread of infection from one organ or tissue of the urinary system to another may occur when tubercle bacilli are being carried by the urine. Bacilli may be deposited on the mucosa of the ureter, the bladder, or the posterior urethra. Other pathology or some obstruction which may exist in the lumen of the ureter, predisposes these areas to secondary tuberculous infection with subsequent stricture formation or dilation and thickening of the entire ureteral wall. When stricture of the ureter results in obstruction to its lumen with unilateral renal involvement, urinary symptoms and findings may disappear (autonephrectomy). The bladder mucosa which is very resistant to infections of all kinds may not become involved at once. If, however, it is constantly bathed with urine containing tubercle bacilli, irritation develops which is followed eventually by inflammation, ulceration and involvement of all of its coats. We do not believe from our experience that tuberculous involvement of the second kidney occurs as a direct result of contamination of this kidney pelvis by tubercle bacilli reaching it by reflux passage from the bladder[3]. Although this phenomenon occurs in 14.6% of our patients examined for renal tuberculosis, bilateral hematogenous renal involvement presents a more logical method of infection.

By direct transplantation, the urine may infect the posterior urethral mucosa adjacent to the exit of the prostatic ducts, and from this area the prostate may be directly infected. From here infection may spread through the vas into the epididymis. Bilateral epididymal involvement eventually occurs in 60 per cent of patients with genital tuberculosis. Careful inspection of the prostatic urethra should always be a part of a thorough urological study when tuberculosis of the genitourinary tract is suspected. This examination will frequently reveal enlarged prostatic ducts associated with prostatic tuberculosis, sometimes in patients who have no symptoms indicating this condition. Tuberculous infection of the prostate may produce cystitis by direct extension of the inflammation through the urethra and thence into the bladder. We have observed this condition in patients whose renal focus has been previously removed. The extent of tuberculous involvement of the ureter, the bladder, the prostate or the epididymis, bears no direct relationship to the extent of involvement of one or both kidneys. Although direct hematogenous infection is possible in the prostate, seminal vesicles and epididymi, we are convinced from our clinical experience that the original focus of tuberculosis in the genitourinary tract is in the kidney. We have yet to examine a patient with genital tuberculosis who has no evidence of a renal lesion.

TREATMENT

Non-destructive renal tuberculosis should be treated by constitutional means, bed rest, heliotherapy, etc. This early inflammatory, non-destructive process in the kidney should be repeatedly rechecked by frequent unrinalyses and retrograde pyelograms. If these reveal that no filling defect subsequently occurs, the patient should be treated conservatively. If evidence of destruction develops, surgical removal of this kidney may be considered.

The very small destructive lesion of renal tuberculosis of the ulcerative group may with safety be temporarily watched. If tubercle bacilli and pus cells are continuously found in the urine or if the lesion progresses it may eventually require surgical treatment;

however, the contra-lateral kidney must reveal no evidence of a tuberculous infection, the patient's defense mechanism must be good, and other lesions of tuberculosis must be sufficiently stable to permit surgery without extra risk.

The destructive lesions which we have described above as parenchymal abscess and tuberculous pyonephrosis require surgical treatment providing conditions previously mentioned exist.

Bilateral renal tuberculosis rarely requires surgical treatment. The duration of a patient's life is dependent upon the amount of functioning renal tissue which he has present in his body; therefore, the removal of part of this functioning kidney tissue will naturally shorten his life. When ureteral obstruction, severe pain or uncontrollable hemorrhage occur, nephrectomy may be justifiable.

The surgical treatment of renal tuberculosis is rarely an emergency procedure except to relieve severe pain or prolonged hemorrhage. Adequate time may be taken to arrive at a correct diagnosis and to determine the best method of treatment.

Unless obstructed, removal of the entire ureter is infrequently necessary. Destruction of the lumen of the lower segment by the injection of phenol may obviate the necessity of a subsequent ureterectomy.

Tuberculous ulcers and chronic inflammatory areas in the bladder may be destroyed by repeated superficial coagulation with bipolar diathermy[4]. This method of treatment must be carefully done and will produce marked relief from the severe symptoms which accompany these conditions.

Surgical extirpation of the prostate and seminal vesicles for tuberculous infection is rarely or never indicated. Constitutional treatment, bed rest, heat therapy and removal of other genitourinary foci are usually followed by clinical improvement.

Tuberculous epididymitis may require aspiration, drainage, heat therapy, actinotherapy, or eventual surgical removal. Careful epididymectomy rather than castration is the surgical method of choice.

All lesions of tuberculosis are local manifestations of a general disease. Constitutional treatment before and after surgery must be utilized if the best results are to be obtained.

Our modern conception of genitourinary tuberculosis[5] following our fifteen years of clinical study of patients suffering with these lesions embraces the following facts:

1. Any patient with tuberculosis may possibly have unrecognized renal involvement. Repeated urinalyses and complete urological studies should be made before a negative diagnosis is given.

2. The hematogenous route of metastasis of tubercle bacilli from the thorax to other portions of the body is more likely to produce bilateral than unilateral renal involvement.

3. The primary focus of tuberculous infection in the genitourinary tract is most often in the kidney.

4. Early genitourinary tuberculosis is usually a symptomless condition.

5. Proper treatment for genitourinary tuberculosis depends upon the lesions that are present. It should be both medical and surgical.

6. The treatment prescribed must recognize that an isolated lesion of tuberculosis is only a local manifestation of a general disease. Constitutional treatment should be a part of any method prescribed for any tuberculous lesion.

7. The general practitioner and the physician interested in the treatment of tuberculosis must change many of their opinions concerning genitourinary tuberculosis. Since early lesions produce no symptoms, the practitioner and the phthisiologist must suspect and search for evidence of these in the genitourinary tract if they are to be discovered early. Particular attention must be directed toward the patient who presents evidence or spread of the infection from the thorax.

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DISCUSSION

Dr. W. M. Kearns (Milwaukee): We are all grateful to Dr. Thomas for coming here and giving this excellent presentation. His researches and reports have helped to change the story of genitourinary tuberculosis. Today he has stressed two important recommendations: first, that the disease should be recognized earlier by the general practitioner and, second, that genitourinary tuberculosis should be considered a part of systemic tuberculosis and consequently treated with prolonged hygienic care.

Early recognition is accomplished by the demonstration of the tubercle bacillus in the urine. Repeated Ziehl-Neelsen stains, and, if necessary, guinea pig inoculation will demonstrate the organism in nearly 100% of cases. Since this is the one real pathognomonic finding, it is surprising that the general practitioner is not more ready to search for the organism. The aversion of the general practitioner to search for tubercle bacilli in the urine is well illustrated by the experience of Dr. E. A. Fletcher in Milwaukee, who, in the first twenty years of practice of urology, received only one patient in whom tubercle bacilli had been demonstrated by the referring physician. Since the urologist is dependent, for better end results, upon the earlier recognition, the general practitioner must be more alert and shoulder part of the responsibility.

Dr. Thomas' observations in regard to the frequency of occurrence of foci in different parts of the body and the need for strict hygienic regimen is in accord with the convictions of Bugbee and others among us who are able to observe these patients in tuberculosis sanatoria before and after the development of urinary tuberculosis. I have seen Dr. Bugbee induce patients, in New York City, to spend a month or more in Lawrence Hospital at Bronxville, preparatory to nephrectomy for tuberculous kidney. He attributes his excellent end results to his care in this respect. Too frequently, patients are poorly prepared for operation. Nephrectomy done at an inopportune time contributes to the likelihood of the lighting up of pulmonary lesions or development of bone or other types of tuberculosis. In many patients there is need for preliminary rest, and blood transfusion. Postoperatively a long period of strict sanitarium hygiene or its equivalent is imperative.

During operations on the right kidney for tuberculosis the descending or extraperitoneal portion of the duodenum may be injured. This accident is a real calamity because fistula usually develops. The patient in a few days passes by in the pathological revue.

About eight years ago it was my lot to experience this accident while removing a large pyonephrotic kidney which had previously been decapsulated and fixed. Following this a review of the current literature, and all of the well known urologic texts as well, revealed universal avoidance of discussion of the subject of duodenal fistula following renal surgery. Even Rathburn, in his quite recent monograph on accidents of renal surgery, omits reference to duodenal fistula. Conversation with a number of urologists and surgeons, some of them teachers and authorities, brought neither enlightenment nor encouragement. Finally, upon a visit to Ann Arbor, Dr. Hugh Cabot was confronted. He knew that, promptly done, jejunostomy offered hope of recovery. Credit was given to Dr. Wm. Mayo for first suggesting the procedure in 1914. Since that time others have contributed additional helpful measures.

Duodenal injury is quite apt to occur when operating upon a large adherent kidney. Even though immediate painstaking repair is carried out, in a few days a yellowish secretion will make its way through the irritated tissues and skin. Soon there results a markedly reddened, angry, gaping wound. Crater-like areas appear, due to the action of the digestive fluids. The patient becomes severely toxic and dehydrated. Extreme exhaustion results because of the change in body chemistry, resulting from the loss of vital intestinal juices containing elements normally returned to the blood by reabsorption. No amount of transfusion or intravenous, subcutaneous and rectal administration, will avoid the exitus of the patient unless other precise measures are carried out.

An immediate jejunostomy, with omission of all oral feeding as originally advised by Mayo, is imperative. Mayo also suggested a later transperitoneal repair of the fistula if it persisted. This persistence should be easily obviated by use of Potter's method of treating the tract. Whenever secretion accumulates, the wound is aspirated through its length with a catheter attached to the suction apparatus. Injections are made at frequent intervals with tenth normal hydrochloric acid solution to neutralize the alkalinity and inhibit digestion by trypsin. Wet dressing around the wound and a gauze wick into it help the application. It has also been found advisable to add to the hydrochloric acid solution, sterile beef extract and olive oil, to act as a pablum for the excess of pancreatic juice and bile.

Advocates of the hydrochloric acid method have succeeded in healing lower level duodenal and jejunal fistulae with this treatment alone. However, in the higher level duodenal fistulae this treatment combined with the more radical jejunal feeding, if conditions permit, no doubt is the more reliable method.

With the prompt application of these measures a brighter outlook is certain after this complication.

In many patients following nephrectomy and arrest of tuberculosis in the urogenital tract, there persists a very annoying and exhausting frequency of urination due to contracture of the bladder. The

(Continued on page 432)

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« « « EDITORIALS » » »

Constipation

CONSTIPATION is a symptom and not a disease. A definition of constipation is of necessity elastic and somewhat involved since it considers the elements of frequency of evacuation, volume, consistency, and rate of transit of the fecal mass through the intestines. Fundamentally, constipation is undue and habitual delay in the evacuation of fecal material, but due consideration must be given to the above factors in attempting to formulate a complete definition.

Constipation as a symptom has been the subject of discussion in a number of articles published in the past five years in several of our own national and state medical journals, as well as in Canada, Australia, and the British Isles, Germany and France. It seems timely to attempt a brief summary of the factors involved.

The position of the colon varies widely from the text-book standards of past generations. The cecum is in the iliac fossa in 85–90% of the population, and the lowest point of the transverse colon is 3 to 4 inches below the inter-iliac line in 40% of healthy college students. The hepatic and splenic flexures vary in position to an equally high degree. Functional efficiency has far greater significance than anatomic position. In the majority of individuals the low positions of the viscera bear no associated functional relationships. Severe functional disturbances may occur when the viscera lie in the presumably normal "text book" position.

The human digestive tract is a compromise between the herbivorous and carnivorous types. This has a real significance in the selection of diet and the treatment of constipation. The "bland diet" for a human being in actual fact is probably not the low residue non-roughage diet commonly prescribed.

The products resulting from food digestion in the stomach and upper intestine arrive at the cecum in a mixed fluid state in 2–4 hours. The gastro-colic reflex which may be initiated by the ingestion of food and sometimes even by the smell, sight, or thought of it, results in the discharge of the ileac contents into the cecum. In the cecum and ascending portion of the colon particularly, churning movements of the mass occur while the body recovers the water, end products of carbohydrate, fat, and protein digestion are absorbed, and cellulose is subjected to bacterial action. The material seems to be pushed along as far as the hepatic flexure without marked peristaltic waves. In the transverse colon mass movements appear periodically, a contraction wave develops and sends a cylindroid into the descending colon, perhaps as far as the recto-

sigmoid. Normally this mass action occurs perhaps a half dozen times daily.

A fecal mass in the rectum normally arouses the urge to defecate. The entire fecal mass as far back as the splenic flexure may be evacuated. Sometimes only the mass filling the rectum and sigmoid is passed. Less often even a larger mass is passed—after such a large stool, the defecation reflex may not appear again for 2 or 3 days.

The intestinal neuro-muscular apparatus has distinctive characteristics. Contractions are more sluggish than those of voluntary muscle. The tone and consequently the length and diameter of the bowel change constantly. Successive stimuli make it refractory (in a manner similar to the more familiar cardiac muscle properties). A rest leaves the bowel reactive. After a night's rest the mechanism is at its highest efficiency and may explain the tendency of the average individual to have his most satisfactory bowel movement after breakfast. The colon also has the characteristic of being able to maintain a lasting contraction without fatigue. Direct irritation by ulcers at the anus, in the colon, at the pylorus or cardia, and irritant substances in diverticuli of the colon may be mentioned as causes of localized and at times generalized spasm or contracture. The sphincters being collections of muscular tissue respond more readily and may show spasm when the rest of the gut does not.

Alvarez's "gradient theory" of the mechanics of the digestive tract shows a gradual fall in the rythmic rate as one proceeds from the jejunum to the ileum. Muscle tones, metabolic rate, and irritability are more marked at the duodenum than any point caudad. Alvarez expresses it, "the rate of rythmic contraction continues to vary inversely as the distance from the pylorus". The colon does not show a rhythmic rate approaching that of the small intestine, and its irritability is considerably less. The blood supply of tissues roughly parallels their metabolic rate. The colon has the least blood supply of the entire alimentary tract, and surgeons are handicapped in their surgical procedure for that reason. The colon is designed to hold material for hours. In constipation, overactivity of the colon may occur, the water being absorbed too rapidly, or there is undue delay in the passage of the mass allowing a greater amount of time for absorption.

Many constipated people are constipated through laziness, poor toilet facilities or confining work which leads them to neglect the defecation reflex. As neglect continues the defecation reflex becomes weaker and may disappear. Irritation or inflammation of the ano-rectal region may inhibit the reflex in addition to making defecation painful and difficult. Insufficient food, and infrequent eating may result in deficient residue so there is no stimulation of the reflex. Deficient water intake may so inspissate the feces that they become ineffective as stimulators, or they cause irritation and local spasm. In diabetes, hyperthyroidism, and fevers, the water may be diverted from the bowels causing the same result. Laxatives may cause irritation and inflammation, remove water, alter secretion, and reduce fecal contents so that no normal defecation reflex can arise. After purging, only harm can result, when more catharsis is attempted within 24 or even 48 hours. Sedentary life tends to weaken muscles, intra-abdominal pressure falls and constipation is favored. Obstruction by bands, adhesions etc., and other causes of stasis and delay of the fecal stream allows rapid water extraction and leaves hard, fecal masses. Carcinoma gives no evidence till it interferes mechanically with the fecal stream because of their tendency to produce degenerative changes in the muscular tissue. Emotional states, irritating food residues, lead, tobacco, caffeine, and organic disease of the spinal cord are causes of stasis. In spastic constipation the contractions are persistent and are brought on by some irritating factor. There is little or no supporting evidence for atomic constipation.

This review should show that constipation is a symptom which may be present in a number of medical conditions which must themselves be treated if success is to follow treatment. For its etiologic solution constipation demands the highest professional skill, and its treatment requires patience, ingenuity, medical, surgical, and often neurological and psychiatric experience. N. A. H.

. . . . THE PRESIDENT'S PAGE . . . .

Good Intentions—Bad Results

AT THIS time I think it timely to consider the fate of victims of highway accidents. The number of victims is mounting each year without much publicity as to management of the victim after the accident. Great stress is laid upon observing traffic regulations, careful driving and rendering assistance in case of accidents, but nothing about the correct manner of handling these victims of severe injuries upon the street or highway.

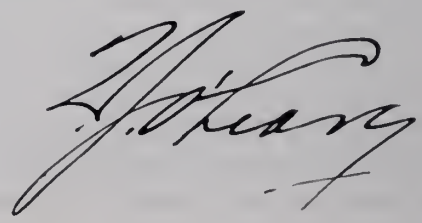
It is true that the road officers have some knowledge of procedure, but they are so few in number and have so much territory to cover that they are seldom at the scene of an accident. The city police have some training in the proper handling of injured persons, but they at times have noticeable lapses of memory.

Two weeks ago a patient, an elderly man, injured in an automobile accident, receiving a head injury, was transported eighty miles seated on the rear seat of a sedan to a hospital in our city. He died within twelve hours. Postmortem diagnosis was a fracture on the base of the skull. This is just an example of what we see, if not every day then at least every week-end, during the summer months.

How many times have we seen victims with broken legs doubled up in an automobile while being removed from the scene of an accident to a hospital, the Good Samaritan rendering aid with the best of intentions, but through his ignorance creating irreparable damage to soft tissues of the injured member.

What are we going to do? The railroads and large industrials do not handle their accident cases in such a manner as described. The surgical departments, through their safety codes, have schooled their employees well in the proper manner in caring for these men who are injured. I think the driving public should be educated in first aid service, especially stressing and impressing upon them what not to do in these serious emergencies. The great urge of the Good Samaritan is to quickly remove the victim from the scene of the accident, having no knowledge of the seriousness or the extent of his injuries.

The campaign of educating the general public could well be instituted through the local medical societies by short instructive addresses at luncheon clubs and other gatherings of men or women and through newspaper publicity. It would be well if a pamphlet containing precise and emphatic regulations covering the proper management of persons injured on the highway accompanied each set of license plates.



Society Proceedings

CHIPPEWA

Members of the Chippewa County Medical Society met at Hotel Northern, Chippewa Falls, on May 9th. Following the dinner at six-thirty, the scientific program was presented:

"Pernicious Anemia" by Dr. K. H. Doege, Marshfield.

"Bronchoscopy" by Dr. L. A. Copps, Marshfield.

"Two Case Reports on Chronic Endometriosis" by Dr. C. B. Hatleberg, Chippewa Falls.

DANE

The April meeting of the Dane County Medical Society was held at the Loraine Hotel, Madison. The program consisted of the following papers:

"Acute Pancreatitis" by Dr. W. T. Lindsay, Madison.

"Various Aspects of the Cancer Situation" by Dr. Edwin F. Schneiders, Madison.

"Relief Drug Administration" by Dr. H. E. Marsh, Madison.

Dr. L. V. Sprague, Madison, gave a report of the credit rating bureau.

The May meeting was held at Lake View Sanatorium. Following the dinner at six-thirty o'clock, members of the Society inspected the premises. A very interesting program of case presentations by members of the staff of the Sanatorium concluded the meeting. N. T.

MILWAUKEE

The May meeting of the Medical Society of Milwaukee County was held at the Milwaukee Athletic Club on the 10th. The program consisted of the following addresses:

"Industrial Medicine—A Stepchild" by Dr. Alice Hamilton, Department of Industrial Toxicology, Harvard University School of Public Health.

"The Endocrines and the Reproductive Function" by Carl R. Moore, Ph.D., University of Chicago.

The social hour concluded the meeting which was the last until next October.

ONEIDA–VILAS

Election of officers took place at the May 9th meeting of the Oneida–Vilas County Medical Society. Dr. C. A. Richards, Rhinelander, President; Dr. R. A. A. Oldfield, Eagle River, Vice President; Dr. L. F. Kaiser, Rhinelander, Secretary–Treasurer; Dr. W. S. Bump, Rhinelander, Delegate, and Dr. O. R. McMurry, Eagle River, Alternate Delegate.

The Society went on record as opposed to all contract medical practice, with the exception of the county home. All physicians in the future who accept contracts shall be automatically dropped from membership in the Oneida–Vilas County Medical Society.

A program of public health work was outlined at this meeting. L. F. K.

ROCK

Dr. Ralph M. Waters, Madison, was the principal speaker before a meeting of the Rock County Medical Society held on April 23rd at the Monterey Hotel, Janesville.

Mr. L. J. Inderbitzen of Mead Johnson & Company also spoke.

TREMPEALEAU–JACKSON–BUFFALO

A meeting of this Society was held in April at the offices of Drs. Palmer and Weber of Arcadia. Following dinner at Hotel Arcadia, the meeting took place.

"Allergy" was the subject of a talk by Dr. N. S. Simons of Whitehall which was discussed by Dr. R. R. Richards of Blair.

Presentation of a patient was made by Dr. J. P. Skroch of Arcadia.

WINNEBAGO

"Back Pains" was the subject of a talk by Dr. Merritt LaCount Jones of Wausau at a dinner meeting of the Winnebago County Medical Society on May third at Menasha.

NINTH DISTRICT

The annual meeting of the Ninth Councilor District Medical Society was held at Stevens Point on May first.

Dr. William S. Middleton, Madison, conducted a clinic at St. Michael's Hospital at four o'clock.

Election of officers took place after the dinner, the following being chosen: President, Dr. Frank X. Pomainville, Wisconsin Rapids and Dr. Joseph F. Smith, Wausau, re-elected Secretary–Treasurer.

The scientific program was then presented:

"Shoulder Injuries, With Special Reference to Injuries to the Supraspinatus Tendon" by Dr. L. C. Pomainville, Wisconsin Rapids.

"The Evaluation of End Results in Fractures" by Dr. W. F. Cowan, Stevens Point.

"Postoperative Pulmonary Complications" by Dr. William S. Middleton, Madison.

TENTH DISTRICT

The Spring meeting of the Tenth District Medical Society was held on Saturday, May 11th, at the Hi-Dale Golf Club, Rice Lake.

Golf was played in the afternoon which was fol-

lowed by dinner at the club house. The program consisting of the following papers was then given:

"Differential Diagnosis between Functional and Organic Neurological Diseases" by Dr. E. M. Hammes, St. Paul.

"The Injection Treatment of Hemorrhoids" by Dr. Walter Fansler, Minneapolis.

GREEN BAY ACADEMY OF MEDICINE

Dr. George W. Crile of the Cleveland Clinic, Cleveland, Ohio, was the guest speaker at the annual meeting of the Green Bay Academy of Medicine which was held on May 18th at the Northland Hotel.

At three-thirty Saturday afternoon, Dr. Crile conducted a dry clinic, at which time he discussed hyperthyroidism, peptic ulcer, and polyglandular disease.

The annual banquet took place at six-thirty o'clock following which Dr. Crile gave an address on "The Surgical Treatment of Polyglandular Disease, Hypertension, and Epilepsy."

MILWAUKEE ACADEMY OF MEDICINE

Dr. Bernard Fantus of Chicago spoke on "Some Important New and Nonofficial Remedies" before a meeting of the Milwaukee Academy of Medicine on May 21st.

MILWAUKEE HOSPITAL INTERNES

The monthly meeting of the Internes' Association of Milwaukee Hospital was held on April 17th at the home of Dr. John Haug.

Dr. Hans Hefke was the speaker at this meeting and had for his subject "Artificial Fever Therapy and Its Results."

MILWAUKEE NEURO-PSYCHIATRIC

The May meeting of the Milwaukee Neuro-Psychiatric Society was held on Thursday the 23rd at the University Club. The program follows:

"The Premotor Syndrome; Its Localizing, Clinical and Prognostic Significance" by Dr. A. T. Ross.

"Historical Survey of the Psychoneuroses" by Dr. Annette C. Washburne.

"A new Method of Lumbar Puncture" by Dr. I. B. Shulak.

"Contrast Substances to Visualize Cerebro-Spinal Pathology" by Dr. H. H. Reese.

MILWAUKEE OTO-OPHTHALMIC

The May meeting of the Milwaukee Oto-Ophthalmic Society was held at the University Club on the 14th.

Dr. Avery D. Prangen of the Department of Ophthalmology, Mayo Clinic, gave an address on "The Relationship of Orthoptic Training to the Surgical Treatment of Strabismus."

UNIVERSITY OF WISCONSIN

The eighth William Snow Miller lecture was presented by Leslie Brainerd Arey, Ph.D., Chairman, Department of Anatomy, Northwestern University, at a meeting of the University of Wisconsin Medical Society held on May second at Service Memorial Institutes building, Madison. The subject of his address was "Factors that Influence the Course of Wound Healing."

The William Snow Miller lectureship was established in 1928 by Phi Beta Pi Medical Fraternity.

WISCONSIN UROLOGICAL SOCIETY

The spring meeting of the Wisconsin Urological Society was held at St. Michael's Hospital at Stevens Point on May 4th. Morning and afternoon sessions were held at the hospital and in the evening the guests were entertained at dinner at Weber's Lodge. The program consisted of the following:

"Spontaneous Rupture of Bladder" by Dr. C. R. Marquardt, Milwaukee.

"Case of Urethral Stricture" by Dr. G. H. Ewell, Madison.

"Case Report on the Familial Tendency of Polycystic Kidney" by Dr. H. M. Stang, Eau Claire.

"Case Report on Congenital Hydronephrosis" by Dr. Erich Wisiol, Stevens Point.

"Presentation of New Instruments" by Dr. W. M. Kearns of Milwaukee.

"Surgical Infection of the Kidney" by Dr. W. J. Carson of Milwaukee.

"Late End Results of Conservatism in Renal Surgery" by Dr. J. C. Sargent, Milwaukee.

"Comparison of Results in Fifty Transurethral and Fifty Suprapubic Prostatectomies" by Dr. W. M. Kearns, Milwaukee.

"Statistical Study of 300 Prostatectomies" by Dr. Robert Irwin, Milwaukee.

"Would You?" by Dr. M. W. Sherwood, Milwaukee.

"Replacement Lipomatosis of the Kidneys" by Dr. E. W. Exley, Minneapolis.

"The Use of Concentrated Sodium Chloride Solution in the Control of Bleeding in Prostatic Resections" by Dr. W. G. Sexton, Marshfield.

Officers elected are the following: Dr. G. H. Ewell, Madison; Dr. W. E. Bannen, La Crosse, Vice President; Dr. S. J. Silbar, Milwaukee, was reelected Secretary. The fall meeting of the Society will be held in Madison in October.

CHIROPRACTIC BILL KILLED

By a vote of 45 to 39 the Assembly on Wednesday, May 29th, killed bill 421, A, which would have exempted chiropractors from the Wisconsin Basic Science Law of 1935. The vote was preceded by an hour of debate which will be reported in the next issue of the Journal.

A motion to revive the bill was killed 55 to 36 on Wednesday, June 5th.

The Woman's Auxiliary

Mrs. Rock Sleyster, 1220 Dewey Ave., Wauwatosa, *President*
Mrs. F. Gregory Connell, 420 Washington Blvd., Oshkosh, *President-elect*
Mrs. George H. Ewell, 2024 Kendall Ave., Madison, *Secretary*
Mrs. Donne F. Gosin, 631 S. Quincy Ave., Green Bay, *Treasurer*
Mrs. R. W. Tomlinson, 1021 Park Place, Wilmington, Del., *National President*

Wisconsin Auxiliary Wins National Hygeia Contest

ONE thousand one hundred and ninety-nine yearly Hygeia subscriptions were placed by the Wisconsin Auxiliary during the period of one year giving Wisconsin first place among all of the state auxiliaries competing in the National Auxiliary Hygeia contest. Each year before the National Convention the American Medical Association announces the winning states. Last year the Wisconsin Auxiliary obtained third place.

In a recent announcement, Mr. F. V. Cargill, circulation manager of Hygeia, reported that the total number of subscriptions received from May 1, 1934, to April 30, 1935, reduced to twelve-month subscriptions was 1,199 8/12. In a letter from Mr. Cargill, he said, "On behalf of the management and myself, I want to thank you, your county Hygeia chairmen, officers and auxiliary members of Wisconsin for your splendid cooperation and assistance in making possible this wonderful showing."

A very large percentage of the Hygeia subscriptions were placed in schools, in accordance with the program outlined by the National Hygeia chairman. This achievement represents considerable time and effort on the part of practically every Hygeia committee in the state. I know that the officers of the State Auxiliary are delighted with the progress made in widening the circulation of Hygeia, and I should like to express my personal appreciation for the excellent Cooperation received through each county chairman.

RUTH R. SCHULZ (Mrs. Irwin)
Wauwatosa,
State Hygeia Chairman.

Program for the Atlantic City Meeting

Woman's Auxiliary to the American Medical Association

Sunday, June 9

7:00 p. m. Dinner to the National Board by the Woman's Auxiliary to the Medical Society of Delaware. Claridge Hotel.

Monday, June 10

10:00 a. m. Preconvention Board Meeting. Library, Hotel Traymore.

1.00 p. m. National Board Luncheon. Submarine Grill, Hotel Traymore.

2.30 p. m. Preconvention Board Meeting. Library, Hotel Traymore.

7:00 p. m. Get Together Dinner. Ritz Carlton Hotel.

9.00 p. m. Reception and Musical honoring wives of members of the Canadian Medical Society. Ritz Carlton Hotel.

Tuesday, June 11

8:00 a. m. Southern Breakfast.

9:00 a. m. General Meeting. Library, Traymore Hotel. Mrs. Robert W. Tomlinson, presiding.

1:00 p. m. Luncheon at Hackney's, followed by a chair ride or sailboat ride.

4:00 p. m. Tea. Woman's Auxiliary to the Philadelphia County Medical Society.

8:00 p. m. General Meeting of the American Medical Association. Auditorium.

Wednesday, June 12

9:00 a. m. General Meeting. Library, Traymore Hotel. Mrs. Robert W. Tomlinson, presiding.

12:30 p. m. Reception and Auxiliary Luncheon. Main Dining Room, Traymore Hotel.

Hygeia Pageant. Program sponsored by Woman's Auxiliary to Medical Society of New Jersey.

7:00 p. m. Special entertainment, movies, informal dance. Steel Pier.

Thursday, June 13

9:00 a. m. Group discussions.

10:00 a. m. Postconvention Board Meeting.

1:00 p. m. Luncheon, card party and style show. Ritz Carlton Hotel.

7:00 p. m. "Bring Your Husband Dinner." Traymore Hotel.

9:00 p. m. President's Reception and Ball. Auditorium, Convention Hall.

Friday, June 14

9:00 a. m. Golf Tournament. Northfield Country Club.

1:00 p. m. Golf Luncheon.

Golf privileges throughout the week.

The National President says "No one will doubt the warmth of the welcome extended when the complete program is made known. The women of the states of New Jersey, Pennsylvania and Delaware, of Philadelphia County and of the counties of New Jersey are banded together with our hostesses, the women of Atlantic County, and this little section of the East opens its heart to you, of the rest of the country, and to its northern neighbors from Canada.

"We want every doctor's wife in the United States to know that all that we have is hers to participate in. If any are not members, we hope that they will familiarize themselves with what we are trying to do and will learn of the joy that is ours in our association with each other and what the friendship thus attained means to all of us, and then, perhaps, they will join hands with us."

"How the Wheels Go 'Round"

By MRS. HARRY J. HEEB

President, Woman's Auxiliary to the Medical Society of Milwaukee County

"HOW the Wheels Go 'Round at the White House," a recent broadcast by Mrs. Franklin Delano Roosevelt, served as the inspiration for the following facts about "How the Wheels of the Woman's Auxiliary Go 'Round". There are a number of our members who are unfamiliar with the setup of our county auxiliary, and it was felt that they should know the functions of each committee and the Board of Directors.

The regular monthly meeting is held on the second Friday of each month, except during June, July, August, and September, when the Auxiliary recesses. Two open meetings are held each year, and this year May and October were selected for these meetings. Should a member wish guest privileges for a closed session, permission may be obtained from the president.

The Board of Directors and officers, supervised by the Advisory Council of the Medical Society of Milwaukee County, hold their meetings on the first Monday of each month in the Directors' room of the Medical Society. The Board and officers direct the policies of the Auxiliary and pass upon recommendations of the several committees.

Following the meeting of the Board of Directors, and prior to the regular monthly meeting, the President contacts all officers and committee chairmen whose reports are to be read at the luncheon meeting. All programs for these meetings are arranged by the Program Committee.

The Social Committee plans the menus, arranges table decorations, handles the reservations, collects the money for the luncheon, and checks the attendance cards for each meeting.

Through the Publicity Committee, which releases all press notices, publicity is given to all meetings and other activities of the Auxiliary. This Committee also reports all activities to the Chairman of the Publicity Committee of the State Auxiliary.

While the duties of the Telephone Committee might not seem consequential, very important messages are continuously being relayed to members of the Auxiliary.

The Public Relations Committee is active throughout the entire year contacting lay organizations and placing speakers from the Society's Speakers' Bureau before such groups.

Tours for the purpose of acquainting members with the work of various welfare agencies in Milwaukee are arranged by the Public Welfare Committee.

The Membership Committee is active during the year endeavoring to increase the membership. Women who are eligible are canvassed for this purpose.

A five-minute report is made at each meeting of our organization by the Educational Committee which reviews all articles appearing under the caption, "Bureau of Investigation," in the Journal of the American Medical Association, which are of value to the Auxiliary.

Our archivist collects and preserves all clippings pertaining to the activities of the Auxiliary, and the history of the administration is compiled by our historian.

The month of March will be remembered as a banner month for successful accomplishment by the HYGEIA committee. For weeks prior to the White

Elephant Sale, which was held on March 14th, this Committee diligently collected, assorted, and arranged sale articles which were so generously given by the members of the Auxiliary and their friends. The results of this venture were beyond the expectations of its sponsors, and the Committee easily attained its goal.

The Flower and Courtesy Committee promoted an April card party. The receipts established a fund to cover the expense of sending messages of congratulations, good wishes, and condolences to members.

Regular and dependable cooperation on the part of our members make the wheels of the Auxiliary go around, and thanks are extended to all members who make our success possible.

NATIONAL PRESIDENT VISITS WISCONSIN

Mrs. Robert W. Tomlinson, Wilmington, Delaware, president of the Woman's Auxiliary to the American Medical Association, spoke at a luncheon meeting of the Milwaukee Auxiliary at the Y. W. C. A. on May 10th. Mrs. Tomlinson was the guest of honor at a number of other affairs. Mrs. Eben J. Carey entertained at dinner at the University Club, Milwaukee, for Mrs. Tomlinson. While in Milwaukee, Mrs. Tomlinson was the house guest of Mrs. Robert E. Fitzgerald.

DODGE COUNTY ORGANIZED

The Executive Board of the Woman's Auxiliary to the State Medical Society are happy to announce the organization of its eighteenth County Auxiliary, which is the Woman's Auxiliary to the Dodge County Medical Society. Under the very capable leadership of Mrs. A. W. Hammond of Beaver Dam, this group of approximately twenty-five Doctors' wives were organized May 29th at the Old Hickory Golf Club after a one o'clock luncheon.

Mrs. Clarence M. O'Hora, Beaver Dam, was elected president; Mrs. Alfred M. Rosenheimer, Beaver Dam, president-elect, and Mrs. Enoch P. Webb, Beaver Dam, secretary-treasurer. These officers will hold office until December, 1936.

Mrs. Rock Sleyster, State President, and Mrs. Eben J. Carey were present and explained the activities of the auxiliaries throughout the State and the history of the National Auxiliary.

We extend a hearty welcome to our new County Auxiliary and anticipate with pleasure the attendance of these new members at the Annual State Meeting in Milwaukee in September. It is our earnest hope that Auxiliaries to other County Medical Societies will be organized during the summer months.

(Mrs. Eben J.) Helene M. Carey,
Organization Chairman, State Auxiliary.

COUNTY NEWS ITEMS

Dane County

The May meeting of the Dane County Auxiliary was held at Lakeview Sanatorium, Madison. Dr. W. C. Reineking spoke on "Modern Hospitalization of Tuberculosis". The June meeting of the Auxiliary will be held at Lake Ripley Country Club, Cambridge.

Milwaukee County

The Annual Mother's Day luncheon of the Woman's Auxiliary to the Medical Society of Milwaukee County was held Friday, May 10th, at the Y.W.C.A.

The Auxiliary was addressed by Mrs. Robert W. Tomlinson, National Auxiliary president, and Dr. Walter L. Bierring, Des Moines, Iowa, president of the American Medical Association.

Mrs. B. Lieberman, violinist, and Mrs. Florence Bettray Kelly, pianist, each played several selections.

Miss Aimee Zillmer, of the State Board of Health, spoke on "The Adolescent Girl—Her Problems" and "Recent Tendencies in Social Hygiene".

Mrs. Rock Sleyster, State President, announced that Wisconsin won first place nationally with 1199 8/12 subscriptions to HYGEIA, Milwaukee County contributing 604 8/12 yearly subscriptions.

The membership committee introduced fourteen new members.

A tour of "The Home for Dependent Children" in Wauwatosa will be sponsored by the Public Relations Committee June 4th. Preceding the tour there will be a picnic lunch at Mrs. Rock Sleyster's home in Wauwatosa.

An informal cabaret dinner dance was held at the Crystal Ballroom of the Schroeder Hotel on May 15th.

A style show will be featured at the Auxiliary luncheon for October 11th.

Dorothy Enzer, (Mrs. Norbert)
Press and Publicity Chairman.

Sheboygan County

Sheboygan County Auxiliary held its May luncheon at Rocky Knoll Sanatorium, Plymouth. Miss Levina Dietrichson, R. N., superintendent of the Sheboygan County Tuberculosis Sanatorium, talked about her work and its results.

The annual picnic of the Auxiliary will be held at Elkhart Lake.

Waukesha County

Three hundred people attended the lecture of Dr. W. W. Bauer of the American Medical Association

at the Waukesha high school auditorium on the evening of April 29th. The talk, sponsored by the Woman's Auxiliary to the Waukesha County Medical Society, dealt with "Health Education vs. Health Racketeering."

Several days before the free lecture, the health officers of Waukesha and Oconomowoc issued statements approving Dr. Bauer's visit to the county. Miss Hertha Voje, Oconomowoc, president of the Waukesha County Auxiliary introduced Dr. Bauer as "a man who studied at our University at Madison, a member of the American Medical Association, former health commissioner at Racine, and one of the foremost of health educators." After the talk, the speaker answered questions from the floor.

Winnebago County

One hundred nine-month Hygeia subscriptions were placed in schools of Winnebago County by the Woman's Auxiliary to the Winnebago County Medical Society. One of the events to raise funds was a card party at Hotel Raulf, Oshkosh, on Friday evening, April 26th.

News Items and Personals

Dr. L. M. Cox of Chicago, who has been doing locum tenens work for physicians in Wisconsin the past several years, has accepted an appointment as physician for the Hagenbeck-Wallace Circus for the season of 1935.

—△—

Dr. Norbert Enzer, Milwaukee, spoke before the Chicago Roentgen Ray Society at its meeting held in Chicago on April 11th on the subject of "The Nature of Human Silicosis."

—△—

Dr. Michael W. Shutkin, Milwaukee, addressed the Wisconsin Dietetic Association at its meeting held on April 5th, on the subject of "Newer Aspects of Nutrition in Gastroenterology."

On April 6th, the Association had as one of their guest speakers Dr. R. P. Schowalter who spoke on "Infant Feeding of the Normal and Ailing Child."

—△—

Dr. George I. Keskey, formerly of Kenosha, is taking postgraduate work in eye, ear, nose and throat diseases at Tulane University. He will continue his studies for another year.

—△—

Dr. F. W. Pope, Racine, Councilor for the second district, sailed on May 8th from Baltimore for Europe. He will return about August 10th.

—△—

The Eighth Annual Graduate Fortnight of The New York Academy of Medicine will be held October 21 to November 2 and will be devoted to a consideration of "Diseases of the Respiratory Tract." A complete program and registration may be obtained by addressing Dr. F. P. Reynolds, 2 East 103rd St., New York, N. Y.

—△—

Dr. Carroll E. Roach, formerly of Freeport, Illinois, has announced the opening of offices at 4332 North Oakland Avenue, Milwaukee.

—△—

Dr. Erwin R. Schmidt of Madison has returned from his European trip where he visited universities and clinics in England, Scotland, Holland, and Germany. While there, Dr. Schmidt also attended a meeting of the German Surgical Congress of which he is a member.

NARCOTIC PERMIT

Members are reminded that they must renew their Federal Narcotic Permit and pay the Federal tax of $1.00 on or before July first.

The American Association of the History of Medicine at its annual meeting on May 6th at Atlantic City elected the following officers: President, Dr. William S. Middleton, Madison; Vice President, Dr. Walter C. Alvarez of Rochester, Minnesota, and Dr. E. J. G. Beardsley of Philadelphia, Secretary.

—△—

Dr. Adrian W. Frankow, formerly of Milwaukee, has become associated with his brother, Dr. Raymond O. Frankow of West Bend.

—△—

Dr. Walter L. Bierring, President of the American Medical Association, spoke on "Historical Sequence of Medical Events" on Friday, May 10th, before Marquette University School of Medicine. After the lecture, Dr. Bierring was the honor guest at a dinner given by the Advisory Faculty of the Marquette University School of Medicine. The Advisory Faculty consists of the heads of all the departments and divisions.

—△—

Wisconsin physicians are asked to watch for two medical bags stolen from the car of Dr. A. H. Barr of Port Washington. One is a black Boston bag about twelve inches in length containing medicine, and the other about eighteen inches in length containing dressings and instruments.

—△—

Dr. Howard W. Christensen, who has been resident physician at Milwaukee County General Hospital the past year, has joined the staff of the Mauston Hospital.

—△—

The next regular examination and board meeting of the Wisconsin State Board of Medical Examiners will be held at the new Marquette Medical School, Milwaukee, on June 25–28, inclusive.

Dr. R. T. Shiman, formerly of New Richmond, has taken over the practice of the late Dr. G. F. Tanner of Turtle Lake.

—△—

Dr. William S. Middleton, Madison, was a guest speaker on the program of the Iowa State Medical Society at its annual meeting held at Davenport, May 8–10. Dr. Middleton spoke on "Postoperative Pulmonary Complications: Their Prevention and Management, and Medical Clinic."

—△—

Dr. C. G. Reznichek, formerly of Antigo, has become associated with Dr. M. C. Canan of Madison.

—△—

Dr. Arnold S. Jackson, Madison, discussed the paper by Dr. J. M. Mora of Chicago on "Thyrotoxicosis" which was presented before the annual meeting of the Illinois State Medical Society held at Rockford, May 21–23.

BIRTHS

A son to Dr. and Mrs. E. T. Harrington, Milwaukee, on April 6th.

A daughter to Dr. and Mrs. H. R. Ausman, Milwaukee, on April 6th.

A daughter to Dr. and Mrs. R. W. Garens, Milwaukee, on April 6th.

A son to Dr. and Mrs. Maurice Olsen, Milwaukee, on April 8th.

MARRIAGES

Dr. R. S. Baldwin, Marshfield, to Dr. Elizabeth Reddeman, Milwaukee, on June first at Milwaukee.

DEATHS

Dr. Harold M. Akey, Merrill, died suddenly of cerebral hemorrhage the day after he resumed practice following a week's illness of influenza.

Dr. Akey was born at Marathon, December 10, 1906, and at the age of seven years moved with his parents to Merrill. He was a graduate of Merrill High School, St. Mary's College, Winona, and Marquette University School of Medicine in the year 1932. Since graduation, he had been in practice with his brother, Dr. A. C. Akey, dentist.

He was a member of the Lincoln County Medical Society, the State Medical Society, and the American Medical Association.

Survivors are his mother, two brothers and one sister.

Dr. M. V. De Wire, Sharon, died at his home on May 6th following several months' illness.

Dr. De Wire was born in Allen County, Kansas, on Feb. 23, 1868. From 1886 to 1891 he taught school and in 1891 entered Rush Medical College from which he was graduated in 1894. He immediately began his practice in Sharon.

RADIO PROGRAMS

Health talks are broadcast over the Wisconsin State-Owned Radio Stations by the State Medical Society of Wisconsin each Tuesday, Wednesday and Thursday at 10:45 A. M. These programs on health are presented at Radio Hall, the broadcasting studio located on the campus of the University of Wisconsin. Tune in near the middle of the dial! Many WHA programs, including health talks, are broadcast simultaneously by WLBL, Stevens Point. This station too, is state-owned.

The schedule follows:

June 11, 1935.	Highway Hazards.
June 12, 1935.	Choosing a Doctor.
June 13, 1935.	Choosing a Doctor (continued).
June 18, 1935.	What's Behind a Prescription.
June 19, 1935.	Fermentation and Disease.
June 20, 1935.	The Family Doctor.
June 25, 1935.	Ponce De Leon's Fountain.
June 26, 1935.	Swimming and Common Sense.
June 27, 1935.	Hazards to Little Tots.
July 2, 1935.	Look Out for Sunburn.
July 3, 1935.	July Fourth Follies.
July 9, 1935.	Gun Powder.
July 10, 1935.	Swat That Fly!
July 11, 1935.	Keeping Cool in Hot Weather.

He was a member of the Walworth County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow and one son.

Dr. Ray M. Frawley, Wausau, died on May 6th after an illness of three months.

Dr. Frawley was born in Chilton, June 27, 1882. In 1905 he graduated from Oshkosh State Teachers College after which he taught for a number of years before entering Marquette University School of Medicine. He received his degree in 1910 and started his practice the same year in Wausau. In November, 1934, he was elected coroner for Marathon County.

He was a member of the Marathon County Medical Society, the State Medical Society, and the American Medical Association.

Surviving him are his widow; two children, Daniel and Jeanne; his mother, Mrs. Anna Frawley of Appleton; four sisters, Mrs. James M. Walsh, Mrs. Gerald Savage and Miss Ethel Frawley, all of Milwaukee and Mrs. Ellen Foote of Appleton, and two brothers, Dr. W. J. Frawley of Appleton and Dr. D. D. Frawley of New York, N. Y.

Dr. A. E. Gendron, River Falls, died on April 20th at the City Hospital, River Falls.

Dr. Gendron was born May 27, 1870 at St. Francis, Canada. He graduated from Laval University, Quebec, in 1893. He started his practice at St.

Ignace, Michigan, later locating at Roberts, where he practiced for eighteen months before coming to River Falls in 1896.

He was a member of Pierce–St. Croix County Medical Society, the State Medical Society, and the American Medical Association.

Surviving him are two adopted sons, Roul and Vere, and an adopted daughter, Helen.

Dr. William A. Lumley, Ellsworth, died on April 9th of pneumonia.

He was born in Ringwood, Illinois, in 1857. For several years he taught a rural school and operated a farm near Ringwood. He later attended University of Illinois College of Medicine from which he graduated in 1894. The same year he began his practice at Renville, Minnesota, and in 1911 he moved to Ellsworth where he remained.

He is survived by his widow and three daughters.

Dr. Simon Miller, Mondovi, died at his home on April 24th.

Dr. Miller was born in Stroudsburg, Pa., in 1848 and was a graduate of the University of Pennsylvania in 1870. After practicing in the east for a few years he came to Wisconsin to establish his practice at Mondovi.

Survivors are his widow and one daughter.

Dr. R. E. Minahan, Green Bay, died at his home on April 27th. He had been in ill health for the past year.

Born in Howard, N. Y., Jan. 27, 1858, he lived with his parents on the farm until 1860 when the family moved to Calumet County, Wisconsin. He attended the public schools and Oshkosh Normal School, graduating in 1880. In 1886 he received his degree from Rush Medical College. He practiced six years at Calumet Harbor and in 1892 he abandoned the practice of medicine to study law. He entered the University of Michigan Law School and obtained his degree in 1894, passed the Wisconsin Bar examination, and the same year returned to Kewaunee to open an office for the practice of law and medicine. In 1898 he came to Green Bay with his brother, Dr. John R., to specialize in surgery.

In 1900 he was elected Mayor of Green Bay and initiated many reforms during his term of office.

He was a member of the Brown–Kewaunee–Door County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow and three brothers, Drs. John R., and Victor I., of Green Bay, and Hugh of La Mesa, California; three sisters, Ellen of Milwaukee, Mrs. Grace Philleo, San Diego, Calif., and Mrs. Mary Hector of La Mesa; three grandchildren, Roger, Nancy, and Robert, all of Green Bay.

Dr. D. J. O'Connor, Appleton, died on May 4th after an illness of four years.

He was born in the year 1874 and was a graduate of Wayne University, College of Medicine, Detroit, in 1897. He practiced in Green Bay from 1902 to 1906 when he came to Appleton. He served as medical superintendent of the Wisconsin State Reformatory at Green Bay from 1899 to 1902. During the World War he served as a member of the volunteer medical corps.

He is survived by his widow, one daughter, two brothers and four sisters.

Dr. George W. Post, Milton, died on May 10th.

Dr. Post was born in the year 1859 and was a graduate of Northwestern University Medical School in 1883.

Survivors are a son and a daughter.

Dr. Fern A. Rice, Delavan, died on April 22nd at his home following an illness of three months.

Dr. Rice was born at New Johnstown, Wis., Oct. 18, 1868. He was a graduate of Bennett College of Eclectic Medicine and Surgery, Chicago, in 1889. He started his practice in Hebron, Wisconsin, and came to Delavan in 1895.

He is survived by his widow and one son.

Dr. Grant F. Tanner, Turtle Lake, died at the Cumberland Hospital on April 22nd.

He was born June 13, 1866, at Ellington, New York, and came to Polk County with his parents in 1870. He attended high school at Dixon, Ill., and then taught school for nine years. In 1895 he graduated from Minneapolis College of Physicians and Surgeons and immediately began his practice at Turtle Lake.

Dr. Tanner was a member of the Barron–Washburn–Sawyer–Burnett County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow and one son.

SOCIETY RECORDS

New Members

Theodore B. McCord, Richland Center.
George L. Boyd, R. 1, Kaukauna.
A. F. Harter, Rhinelander.
Cyrus G. Reznichek, Madison.
Chas. C. Davin, 609—58th St., Kenosha.
C. C. Gascoigne, 609—58th St., Kenosha.
John Schee, Westby.
E. A. Brzezinski, 1225 W. Mitchell St., Milwaukee.
Arthur A. Holbrook, 425 E. Wisconsin Ave., Milwaukee.
Joseph Shaiken, 536 W. Wisconsin Ave., Milwaukee.
Edward M. Lawler, 705 Barnard Ave., Cudahy.
Harold H. Oberfeld, 913 Milwaukee Ave., South Milwaukee.
John A. Gillin, State Bank of Rice Lake, Rice Lake.
Gale W. Huber, Minocqua.
H. J. Westgate, Rhinelander.

L. G. Weed, Rhinelander.
A. R. Bellerue, Waupaca.
John C. Johnson, Ogdensburg.
A. G. Hough, Beaver Dam.
Mark M. Temkin, Beaver Dam.
Ora L. McMurry, Eagle River.
Francis E. Hypes, Three Lakes.
M. K. Rosenbaum, 425 E. Wisconsin Ave., Milwaukee.
F. E. Darling, Jr., 208 E. Wisconsin Ave., Milwaukee.

Change of Address

F. D. Roth, La Crosse to Lewiston, Minnesota.

Medical Economics

DURING May the daily press announced the organization of the Physicians Equity Association of America, Inc., under the presidency of a Dr. Robert Emmett Walsh. This organization, conceived in New York City, has the announced purpose of urging legislation favorable to the profession, discouraging that which they consider injurious to the public interest or the public health, and "in general to obtain for the profession and those allied with it 'a square deal' ". The newspaper announcements declared that the organizers had obtained some fifteen hundred members, that eventually they hoped to enlist in the Association "all the physicians in the country".

In the newspaper story it also appears that the organization contemplates enlisting the aid of osteopaths and dentists.

Because Wisconsin physicians will undoubtedly be solicited to subscribe and pay for membership in this organization, it is of immediate interest to note their avowed purposes. These, the press reports state, are as follows:

1. Elimination of free clinical service for patients who can afford to pay.
2. Assurance of reasonable compensation to the physician for every professional service rendered.
3. Introduction of bills in legislatures to correct abuses now rampant in the practice and regulation of medical, surgical and other conditions affecting public health.
4. Opposition to such legislation as tends to legalize the irregular practitioner.
5. Protection of the public by removing from the profession all unqualified healers.
6. Creation of a clear economic situation between patient and doctor.

A recent President of the State Medical Society of Wisconsin declared that we may not have enough organization but it was certain that we had too many organizations. There is no field of effort announced as constituting the purposes of the new organization in which the present organization of physicians through the county society, the State Society, and the American Medical Association is not now most actively engaged. Moreover, these organizations have been engaged in this work for many, many years and despite the cry of certain Foundation propagandists, the work of organized medicine has been going forward steadily and always in the joint interest of physician and public.

Certain it is that much more could be done if more funds were available with which to work. But supplying funds to the new organization is to but duplicate the overhead, weaken the parent organization, and undoubtedly end with two weak organizations instead of one strong one.

We also wish to suggest that neither the economic interests of the physicians, nor the public interest, can be divorced from the scientific aspects of the practice of medicine. The County Society, the State Society, and the American Medical Association recognized the situation in the very beginnings of their organization and yet that is a truism that Dr. Walsh and his followers either do not see or do not choose to see. In this connection, we would suggest that just the mere organization of physicians of this country on a purely economic basis will result ultimately, if not immediately, in that loss of prestige

which the profession has gained because it is a profession.

This subject is discussed at some length on this page because we are now in the midst of a legislative session in which the State Medical Society of Wisconsin has been fighting with every honorable means to maintain for the people of this state those public health accomplishments and health laws which have been secured in earlier years. In the midst of such a fight, engaging our every resource to the end that that joint and indivisible interest of public and profession may be advanced and not retarded, it is possible that there are some who feel that more could be accomplished in different methods.

Criticism is always valuable and it should be voiced freely that the one organization of medicine in this state may continue to be strong and not sapped by promoters who promise much but who have no record of accomplishment behind them.

We may not have enough organization but it is certain that we can have too many organizations.

THE WISCONSIN DEBATES

We are happy to announce in other columns that Wisconsin may not follow the lead of the National University Extension Association Debate League in debating the subject of socialized medicine in high schools next fall. We are told that the vote will not be announced for Wisconsin until the middle of August.

We have just come from an evening of trying to coach some high school students, freshmen, who were assigned this subject in an inter-school debate. After an evening of trying to make plain the scientific aspects of the practice of medicine which are the whole basis for any intelligent discussion of this subject, we were reminded of what President Theodore Roosevelt said in his Autobiography,—

"Personally I have not the slightest sympathy with debating contests in which each side is arbitrarily assigned a given proposition and told to maintain it without the least reference to whether those maintaining it believe in it or not. I know that under our system this is necessary for lawyers, but I emphatically disbleieve in it as regards general discussion of political, social, and industrial matters. What we need is to turn out of our colleges young men with ardent convictions on the side of the right; not young men who can make a good argument for either right or wrong as their interest bids them. * * * There is no effort to instill sincerity and intensity of conviction. On the contrary, the net result is to make the contestants feel that their convictions have nothing to do with their arguments. I am sorry I did not study elocution in college; but I am exceedingly glad that I did not take part in the type of debate in which stress is laid, not upon getting a speaker to think rightly, but on getting him to talk glibly on the side to which he is assigned, without regard either to what his convictions are or to what they ought to be."

UTOPIA IN CALIFORNIA

Utopia must have arrived in California. This is the only way that anyone familiar with procedure in legislative halls can view the resolution of the California Medical Asociation on the subject of sickness insurance. The resolution itself follows:

"*Resolved*, That the House of Delegates of the California Medical Association recommends that legislation be proposed seeking to establish a health insurance system, mandatory as to certain population groups and voluntary as to certain population groups, which shall include the following principles:

"1. The patient shall have absolutely free choice of physician and hospital.

"2. The Medical Profession shall determine the scope, extent, standards, quality, compensation paid for, and all other matters and things related to, the medical and medical auxiliary services rendered under the system.

"3. There shall be no provision for cash benefits.

"4. The patient shall receive adequate treatment and his physician shall receive adequate compensation.

"5. The foregoing principles shall be maintained with such modifications thereof as may from time to time be recommended or approved by the profession."

In Wisconsin, the Assembly is passing a mixture of chiropractic-naturopathic legislation. In the Utopian state of California, however, we note that the legislature is to give full power to the medical profession in administering a system of sickness insurance with the cost running into millions of dollars so that only the medical profession "shall determine the scope, extent, standards, quality, compensation paid for, and all other matters and things related to, the medical and medical auxiliary services rendered under the system."

And to any one who has observed the enactment of legislation, certainly Utopia has arrived in California as the only legislation to be passed is that "recomended or approved by the profession."

THE GOVERNOR'S PROGRAM

As this Journal goes to press, the details of Governor La Follette's $209,000,000 work program has not been made public. It is a subject that will concern the legislature for more than the matter of a week or two.

From an offhand view it would appear, however,

that if the program is adopted those employed will come under the terms of the Wisconsin Workmen's Compensation Act for injuries and diseases of industry rather than under the renewal of the Federal Civil Works Administration compensation plan. Our membership will be advised as to the details of this program so soon as the information is available.

THE ROSENWALD FUND

Our readers will recall that the Julius Rosenwald Fund employs Mr. Michael Davis and Mr. C. Rufus Rorem. Mr. Rorem is presently engaged in promoting group hospital insurance, while Mr. Davis has been an active advocate of government compulsory sickness insurance in one form or another.

It is of more than passing interest, therefore, that in a press release of the Rosenwald Fund dated May 20th it was announced that $284,000 have been approved for work beginning July first for rural education, medical services, and legal welfare. The press release stated "it was announced that the Fund will continue its active interest in health insurance, pay clinics, public health * * *."

DISCUSSIONAL GROUPS

That thoughtful educators have an understanding of the position related by President Roosevelt in his Autobiography, is indicated by the development of a new trend to replace formal debating with discussional groups. During the past winter, we had the opportunity to spend an entire evening with a group of fifteen students who were studying the question of medical care and its public aspects. Invited to appear before the group were representatives of the medical, dental, and nursing professions, together with others interested. On the occasion of our experience an entire evening was spent in informal presentation of the subject and its further development by questions from all in the group.

Here, indeed, is an educational project. No effort was made to assign any student to any position. Indeed the student might end the complete discussional program without having arrived at a position. All, however, were made fairly well acquainted with at least the broad aspects of the question for discussion. To the writer it seemed infinitely preferable to formal debates.

Postgraduate Course For Wisconsin Physicians in Early Recognition of Cancer and Methods For Treatment

THE Cancer Committee of the State Medical Society, with the approval of the Executive Committee and Council, have arranged to hold a series of cancer clinics during the second week in July in various centers through the State.

These clinics will be conducted by two eminent physicians in this country whose long study and wide experience in the field of cancer diagnosis and treatment gives them the right to speak as experts. The subjects covered will be the diagnosis and treatment of cancerous and precancerous lesions of the uterus and cervix, oral cavity and lip, and breast. They will be conducted by the presentation of cases and discussion of methods used for the early diagnosis and treatment of these cases. Special discussions will include a choice of treatment in which surgery, x-ray and radium will be evaluated as agents. The committee is offering an opportunity for every physician in the Society to hear and see first-hand how the cancer specialists go about diagnosing the disease and how they handle it after it is diagnosed.

Dr. William P. Healy, Cornell University School of Medicine and College of Physicians and Surgeons, Columbia University, will conduct a clinic on the diagnosis and treatment of cancer of the uterus and cervix. Dr. Healy has rendered a distinguished service as visiting surgeon in charge of gynecology, Memorial Hospital for cancer and allied diseases, as consulting gynecologist, Misericordia, Fordham, New York Infirmary for Women and Children and other institutions, and has made important contribution to the advancement of our knowledge of this subject. His clinic alone would be worth a trip to New York City.

Dr. Ellis Fischel, formerly Assistant in Clinical Surgery at Washington University, St. Louis, and at present Associate Professor of Surgery, St. Louis University School of Medicine, will conduct two clinics; one on the diagnosis and treatment of cancerous and precancerous lesions of the oral cavity and lip; and one on the diagnosis of malignant and non-malignant diseases of the breast.

The program for the week beginning July 8th is as follows: Racine, 8; Appleton, 9; Wausau, 10; Eau Claire, 11; La Crosse, 12; and Madison, 13. The first clinic on each afternoon will begin promptly at one o'clock

and will be followed after a fifteen minute interval by the other two.

"In order to bring this postgraduate course to you "declared Chairman Stovall, "it has been necessary to lay careful plans. Because the Extension Division of the University has agreed to assist us in presenting this course to you and because Drs. Healy and Fischel have agreed to come without compensation, it has been possible for us to finance it at a very low cost. There will be some expense for printing and publishing, for traveling expenses for our visitors; and we have, of course, planned for a small honorarium for them as an expression of our appreciation. The cost to each physician registering will be only four dollars ($4) for the three clinics.

"In the next few days you will receive a folder which describes in detail the plans made for these clinics. Enclosed with the folder you will find a card upon which you may signify your registration by signing and returning with your check (without the check if you prefer to pay at the time you attend the clinic) to 314 Extension Bldg., University of Wisconsin, Madison.

"Because the Committee feels that the successful control and prevention of cancer depends upon an informed public as well as informed physicians, we have planned a public lecture to be given at eight o'clock in the evening following the clinics. This lecture is free and will be given by Dr. F. L. Rector, Field Representative of the American Association for the Control of Cancer. The local physician who has charge of the organization of material and accommodation also has charge of arrangements for the public meeting; much of this arrangement he will be able to turn over to the Woman's Auxiliary.

"This announcement comes to you with great enthusiasm on the part of your Committee. The clinics will be diagnostic and therapeutic clinics. There will be no long and detailed discussion of surgical operations. They will be a presentation of clinical information useful to every man in practice whether he has access to a hospital or not. They will deal with the treatment of moles, warts and non-malignant ulcerating lesions as well as definitely malignant diseases of the various organs. This is our Society's effort to meet the on-rush of preventive medicine and to incorporate it in our method of attack on disease. This is not to be construed to mean that we are racing with any competitive force but that we are tuning our medical practice to those advances in medical science which make possible the recognition of incipient diseases; make possible control and prevention of disease.

"The Committee trusts that the profession will receive this opportunity with as much enthusiasm as has been put into its planning."

National Meeting at Minneapolis in June; Joint Session With Minnesota State Medical Association

TWO joint sessions of the Medical Sciences Section of the American Association for the Advancement of Science and the Minnesota State Medical Association will be a feature of the annual meetings of both associations when they meet in June in Minneapolis, Minnesota. The Minnesota association's eighty-second annual meeting will take place in the Minneapolis Auditorium June 24, 25 and 26. The American Association for the Advancement of Science will meet during the same week at the University of Minnesota.

The first joint session will be Monday night, June 24, when the principal speaker will be Dr. William P. Murphy of Harvard Medical School, 1934 Nobel Prize winner in medicine. His subject will be "Diseases of the Blood."

The following morning the second joint session will be held featured by a symposium on blood diseases. Taking part in the symposium will be Dr. Murphy, Dr. T. L. Squier of Milwaukee and Dr. W. A. Bloedorn of the School of Medicine, The George Washington

University, Washington, D. C. Dr. Murphy will discuss the treatment of pernicious anemia with liver, Dr. Squier will talk on drug allergy in primary granulocytopenia, and Dr. Bloedorn will discuss the role of iron in the treatment of anemia. Both Dr. Bloedorn and Dr. Squier will talk under the auspices of the American Association for the Advancement of Science.

Completing the morning's program will be a talk on "The Prevention of Whooping Cough with Bacillus Pertussis Vaccine" by Dr. L. W. Sauer, Associate in Pediatrics, Northwestern University Medical School. In addition to these speakers, a number of other out-of-state physicians will appear on the Minnesota meeting program, including Dr. Max Cutler of Chicago, who will talk on cancer; Dr. Harry Alexander, St. Louis; Dr. Frank H. Lahey, Boston; Dr. Edmund Andrews, Chicago; Dr. Percy Brown, Boston; Dr. E. L. Sevringhaus, Madison, Wisconsin; Dr. E. D. Plass, Iowa City; Dr. Thomas G. Orr, Kansas City, Missouri; Dr. J. F. Barnhill, Indianapolis, and Dr. W. S. Middleton, Madison.

High School Debate Question Not Determined; May Reject Question of "Socialized Medicine"

ASSERTING that Wisconsin was not of necessity governed by the debate question selected by the National University Extension Association Debate League, Miss Almere Scott, director of debating for the University of Wisconsin Extension Division, declared that the question for Wisconsin would not be made known until the middle of August.

"Under the Wisconsin procedure," said Miss Scott, "our own ballot is not opened until the middle of August. Three questions have been submitted to the officers of which the national question is but one."

The question recommended by the National Association is "Resolved: That the several states should enact legislation providing for a system of complete medical service available to all citizens at public expense."

Assembly Advances Bill to License Naturopaths in Wisconsin

BY A vote of 49 to 35, the Assembly on May 22nd refused to kill, and then advanced, the Grobschmidt-Kaiser naturopathic bill. This bill would create a new healing cult in Wisconsin, licensing all who were practicing naturopathy in Wisconsin on January 1, 1935. The terms of the bill were so broad as to practically grant these men a full license to practice medicine and surgery. When the bill was reached in the Assembly on the evening of the 22nd, the debate was opened by Assemblyman Vernon Thomson of Richland Center, who moved the killing of the measure.

Mr. Thomson asked to have the Committee report read, moved indefinite postponement and demanded a roll call. The Committee report was three to three without recommendation. (For the naturopaths: Swanson, Vogel, Dueholm—3; against the naturopaths: Mulder, Kronschnabl, Thomson—3; absent, Mr. Lynch.) The Assembly vote follows:

To Kill the bill—Bergren, Bichler, Caffrey, Cavanaugh, Goldthorpe, Daugs, Fitzsimons, Grimes, Grosvenor, Groves, Hall, M. H., Hipke, Hitt, Howard, Inman, Kelly, Krueger, Laack, La Bar, Lynch, Meisner, Millar, Mulder, Murray, Novotny, Peterson, E. C., Peterson, R. W., Peterson, T. A., Pritchard, Short, Siebert, Staudenmaier, Thomson, Vaughan and Young—35.

For the Naturopaths—Barnes, Bay, Beggs, Blomquist, Brandt, Busby, Douglass, Dueholm, Foley, Franzkowiak, Genzmer, Graass, Grobschmidt, Hall, E. D., Halvorsen, Handrich, Hanson, Harper, Hemmy, Hoesly, Jackson, Johnson, Kaiser, Kiefer, Koegel, Kostuck, Kretlow, Kroenke, Kryszak, Laabs,

Nehs, Nelson, Poltl, Robinson, Ryan, Schilling, Shimek, Sibbald, Sieb, Sigman, Swanson, Sweeney, Theisen, Trego, Vogel, Wegner, Weissleder, Woerth and Mr. Speaker (Mr. Carow)—49.

Absent or not voting—Alfonsi, Baker, Barber, Fuhrman, Garvens, Grassman, Hamata, Kronschnabl, Lomsdahl, Ludvigsen, Michalski, Olson, O'Malley, Rakow, Schenk and Stone—16.

Assemblyman John Kaiser of Milwaukee immediately took the floor for the bill to defend his measure.

"Nature healing has been used for centuries and will always continue to be used," said Mr. Kaiser. "This bill is merely to qualify and standardize naturopathy. These people are operating at the present time all over the world. This bill aims to make sure that newcomers in this field of healing will be qualified. It merely insures the public against receiving further healers in this field who are not qualified. It is now legal by the same bill as we are asking in Wisconsin in twenty-two other states. This same bill passed both houses of the state legislature in Arizona a short time ago. As many of you know, a doctor of medicine is the Governor of Arizona at the present time. He signed this bill and it became a law in Arizona. These men are not asking for anything they are not entitled to. Give them credit for trying to raise their standards and get the confidence of all the people. Some people do not believe in taking drugs. Some people believe in naturopathy. There has not been a single good reason advanced for indefinitely postponing this measure."

Assemblyman Thomson of Richland Center again took the floor and said:

"Bill 451, A., proposes to add a new chapter to Chapter 147, the present medical practice act. I do not believe in letting a group of cultists come before this legislature and set up their own standards and license themselves to treat the sick. We have certain basic science requirements in the state of Wisconsin and certain qualifications are necessary to pass this Basic Science Board. A thorough knowledge of the basic sciences in treating the sick is necessary in several different subjects, such as anatomy, physiology, chemistry, biology, pathology, and all the different things that come into treating the sick. *Anyone who cannot pass this Board is not educated enough to treat the sick.* You may treat with home remedies as you have always done but the State of Wisconsin is not going to license a group of cultists to capitalize for doing this which everyone knows he can do. If any man cannot pass the Basic Science Board of Examiners he should not be allowed to treat the sick. If any man believes that he does not receive a fair examination for treating the sick before this Board of Basic Science Examiners, he always has recourse by a court action."

"The gentleman from Richland Center," declared Mr. Kaiser, "Is always popping off on medical bills without reading them or knowing their contents."

Mr. Kaiser then picked up his bill and proceeded to read from page 3 of the bill, beginning in lines fifty, section (3) Practice, Education, Examination, License and Fee, as follows:

"'It shall be unlawful for any person to practice naturopathy in the state of Wisconsin until he shall first receive a license so to do from the state board of naturopathic examiners. An application in such form as the board may prescribe shall be made in writing to the secretary of the board, at least one month before any regular or special meeting of the board that may be called for the purpose of conducting examinations. An applicant shall furnish satisfactory evidence to the board that he is at least twenty-one years of age and of good moral character; that he has completed a high school course or its equivalent, and successfully completed a four year course of eight months in each year in a reputable, chartered school or college of naturopathy and drugless therapy, having adequate laboratory and clinical facilities for the training of doctors of naturopathy and wherein the curriculum of study included instruction in the following branches: anatomy, physiology, histology, pathology, hygiene, toxicology, phytotherapy, pediatrics, biochemistry, sanitation, chemistry, physiotherapy, diagnosis, symptomatology, gynecology, jurisprudence, first aid, philosophy and the science and practice of naturopathy.

LEGISLATIVE ACTION

Because ten days elapses between the time that the Journal closes its forms and the time that it is received by the reader, readers are urged to refer to the legislative bulletins for current bills and recent actions. Measures reported in the Journal are only those wherein the legislative record will be of interest to all members.

Besides submitting to a written and oral examination, the applicant shall be required to give a practice demonstration showing his knowledge and efficiency in such branches as the board may determine. If the examination is satisfactory, the board shall issue a license to such applicant to practice naturopathy, signed by the members and attested by the president and secretary.'

"I now feel that these high qualifications that these men choose to set up for themselves are certainly as much as anybody could ask for."

"Naturopaths", retorted Mr. Thomson, "propose to set up their own examining boards asking questions and answering them themselves. The human body is the same regardless of what treatment be used as to its material construction, its anatomy, physiology, chemistry, etc."

Assemblyman Grobschmidt of South Milwaukee then took the floor to defend the bill.

"Dentists examine denists," said Mr. Grobschmidt. "We do not allow blacksmiths to examine lawyers. We permit lawyers to examine themselves. We do not have common laborers examine accountants as to their efficiency, why should we not let these men examine themselves, that is, letting recognized men in their field examine the younger and incoming men. Certainly it would be fairer."

Assemblyman Thomson pointed out that the Board of Basic Science Examiners were not healers of any cult; that they were the fairest-minded men that could be found to do this work.

"The Board is composed of a professor at Marquette University, a professor at Ripon College, and a professor at the University of Wisconsin, all leading men in their respective fields of the basic sciences," declared Mr. Thomson.

Assemblyman Fitzsimons of Fond du Lac then offered an amendment striking out lines 79 to 99 which are as follows:

"The board shall grant without examination upon payment to the board of a fee of twenty-five dollars a license to practice naturopathy in the state to any person who was on January 1, 1935, a reputable practitioner and naturopath in the state, and who shall have successfully completed a course of instruction in naturopathy at a reputable school or college and shall have received a diploma in naturopathy from such school or college, and who shall present to the board of examiners in naturopathy, prior to September 1, 1935, a sufficient and satisfactory evidence of the same. A certificate of registration in the basic sciences shall be issued without examination to persons in this class who shall otherwise qualify for a license to practice naturopathy.

Assemblyman Vernon Thomson of Richland Center

"The board may issue without examination upon payment of twenty-five dollars and satisfactory proof to said board, filed in person by the applicant, that he has been licensed to practice naturopathy in another state and reputably engaged in practice for three years next preceding his application, if in the state or states in which the applicant has so practiced, preliminary education, not less than that required in this state is required as a prerequisite to such pactice, and provided that naturopaths of this state, who may remove to any such state, shall be extended a similar privilege by law."

Also striking out lines 103 to 119 as follows:

"Naturopaths shall annually register and pay to the board a fee of five dollars. The board shall keep an annual list of names and places of practice of registrants. All moneys paid to the board pursuant to this section shall within five days after receipt be deposited with the state treasurer. A licensed naturopath of good moral character changing his

residence to another state shall, upon payment of five dollars to the board, receive a certificate signed by the president and secretary and bearing the seal of the board, attesting his license and character. A licensed naturopath, removing to and practicing in another state, shall retain his license in this state upon payment of the annual registation fee of five dollars. Each member of the board shall be entitled to receive not more than ten dollars per day for each day actually engaged in the performance of his duties and three cents per mile for all distances necessarily traveled in the performance of such duties. The secretary of the board may, in addition to per diem and mileage, receive compensation not exceeding one hundred dollars per year.

Also striking out lines 182 to 186:

"Persons licensed under this section may make and sign standard death certificates as provided in sections 69.33 and 69.36. Persons licensed under the provisions of this section may be competent witnesses before the Wisconsin Industrial Commission under sections 102.13 and 102.17."

Assemblyman Sieb of Racine immediately moved the rejection of Mr. Fitzsimons' amendment which would have virtually killed the bill.

"I believe that anybody who thinks himself qualified to treat the sick in the state of Wisconsin should be more than willing to take the basic science examination for treating the sick," said Mr. Fitzsimons. "I fail to see the consistency of a group of cultists coming in to this legislature and asking for the title 'doctor', which is an indication of learned men, and then this same group objecting to taking the first prerequisite examination which other people take for that title of 'doctor'. Inasmuch as a naturopath has told me that his group would be very glad to take the basic science examination, I see no reason why this body should not refuse to reject the amendment."

Assemblyman Novotny of Oshkosh supported the Fitzsimons amendment.

"I think the chiropractic, naturopathic, and all other cultist healing bills should come up before the joint finance committee," declared Mr. Novotny. "We are spending millions of dollars in our wonderful University less than a mile away, to educate doctors to be fully competent to treat the sick and then we legislate these laws which permit these people, quacks mind you, to treat the sick on the same basis as these doctors of medicine on whom we are spending millions to educate. I think we should set up a quack school in place of the Medical School at the University. It would be much cheaper and evidently that is the kind of thing that this present legislature wants. Anyone who cannot pass the basic science examination has no business attempting to treat the human body."

Assemblyman Kaiser of Milwaukee again took the floor urging killing of the amendment.

"Many years ago the medics in practice at that time all successfully got under the wire when the present medical legislation was passed, without examination of any kind."

"Doctors did automatically qualify," replied Mr. Fitzsimons. "They were in practice because they had reason to qualify. They were educated men. They could sign birth, death, and other vital statistics certificates by virtue of their degrees and experience. This new group which you are attempting to set up as doctors tonight is not legally qualified to do any of these things."

"The naturopaths do not want to sign vital statistics," said Mr. Kaiser. "Many years ago anybody could sign vital statistics. It doesn't take a very smart person to sign his name to a birth or death certificate and fill out the simple questions that are asked on that certificate."

At this point a vote was asked and the Fitzsimons amendment was rejected by a vote of 52 to 32.

The vote on the Fitzsimons amendment follows:

For the naturopaths—Barnes, Bay, Beggs, Blomquist, Brandt, Busby, Goldthorpe, Douglass, Dueholm, Foley, Franzkowiak, Fuhrman, Graass, Grobschmidt, Halvorsen, Hanson, Harper, Hemmy, Hitt, Hoesly, Howard, Jackson, Johnson, Kaiser, Kiefer, Koegel, Kostuck, Kretlow, Kryszak, Lomsdahl, Millar, Nehs, Peterson, E. C., Peterson, T. A., Poltl, Pritchard, Rakow, Robinson, Ryan, Schilling, Shimek, Sibbald, Sieb, Sigman, Swanson, Theisen, Trego, Vogel, Wegner, Weissleder, Woerth and Mr. Speaker—52.

Against the naturopaths—Bergren, Bichler, Caffrey, Cavanaugh, Daugs, Fitzsimons, Grimes, Grosvenor, Hall, M. H., Hamata, Handrich, Hipke, Inman, Kelly, Kronschnabl, Krueger, Laack, La Bar, Lynch, Meisner, Mulder, Murray, Nelson, Novotny, Peterson, R. W., Short, Siebert, Standenmaier, Sweeney, Thomson, Vaughan and Young—32.

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Absent or not voting — Alfonsi, Baker, Barber, Garvens, Genzmer, Grassman, Groves, Hall, E. D., Kroenke, Laabs, Ludvigsen, Michalski, Olson, O'Malley, Schenk and Stone—16.

The bill was then engrossed and ordered to a third reading by a viva voce vote.

Assemblyman Kaiser of Milwaukee then asked suspension of the rules and the bill be put on for final passage. The vote on this was 48 to 38. The vote follows:

For the naturopaths—Barnes, Beggs, Bergren, Blomquist, Brandt, Busby, Goldthorpe, Douglass, Dueholm, Foley, Franzkowiak, Fuhrman, Graass, Grobschmidt, Halvorsen, Handrich, Hanson, Harper, Hemmy, Howard, Jackson, Johnson, Kaiser, Kiefer, Koegel, Kostuk, Kretlow, Kryszak, Laabs, Millar, Nehs, Nelson, Poltl, Rakow, Ryan, Schilling, Shimek, Sibbald, Sieb, Sigman, Swanson, Theisen, Trego, Vogel, Wegner, Weissleder, Woerth, asd Mr. Speaker —48.

Against the naturopaths—Bichler, Caffrey, Cavanaugh, Daugs, Fitzsimons, Genzmer, Grimes, Grosvenor, Hall, M. H., Hamata, Hipke, Hitt, Hoesly, Inman, Kelly, Kroenke, Kronschnabl, Krueger, Laack, La Bar, Lomsdahl, Lynch, Meisner, Mulder, Murray, Novotny, Peterson, E. C., Peterson, R. W., Peterson, T. A., Pritchard, Robinson, Short, Siebert, Staudenmaier, Sweeney, Thomson, Vaughan, and Young—38.

Absent or not voting—Alfonsi, Baker, Barber, Bay, Garvens, Grassman, Groves, Hall, E. D., Ludvigsen, Michalksi, Olson, O'Malley, Schenk and Stone—14.

In order to suspend the rules it was necessary to get a two-thirds majority, so the Assembly rejected the suspension of rules and bill 451, A., creating naturopathy in Wisconsin was left in the Assembly ready for final passage on the regular calendar date.

Assembly Passes Chiropractic "Doctor Title" Bill

AS PREDICTED in the May issue of the Journal, the Assembly passed bill 517, A, granting chiropractors the right to use the title of "Doctor of Chiropractic" or the initials "D. C." in their advertising. When the bill was reached on the question of final passage, opposition to it was voiced by Assemblyman Vernon Thomson of Richland Center. He stated that consideration of the bill should be at least delayed until the measure exempting chiropractors from the Basic Science Law had reached the Assembly floor.

"The chiropractors ask the right to use the title 'Doctor' and then, at the same time, the chiropractors put in a bill to exempt them from our Basic Science Law," said Mr. Thomson. "They want to have their own Basic Science examination because the one we have now is too hard. I say that anyone that is treating the sick, I don't care what type of healing they follow, should have at least the fundamentals of treating the sick. They want to be called 'Doctor' because it carries with it the idea of long years of study. Then in the same breath they want to get by without knowing how to treat the sick.

"I want you to know the seriousness of allowing these men that have had only three to six months training to treat the sick and use the title of 'Doctor'. It is true that there are others that use the title of 'Doctor'. The lawyers, the veterinarians, and the fence post doctors use the title, but when you use the title 'Doctor' in regard to treating the sick you are talking about an entirely different thing. You are referring to a person that has had a long period of supervised and controlled education and training.

"I can't understand how the legislature can confer the title of 'Doctor' on these men by legislative action. We are dealing with a serious problem, with serious consequences. I hope that this bill is indefinitely postponed."

The Assembly rejected the plea for killing of the measure by a vote of 60 to 25. The roll call follows:

For granting chiropractors the "Doctor" title—Alfonsi, Baker, Barnes, Bay, Beggs, Bergren, Bichler, Blomquist, Brandt, Busby, Goldthorpe, Dueholm, Franzkowiak, Fuhrman, Graass, Grassman, Grimes, Grobschmidt, Grosvenor, Hall, E. D., Hall, M. H., Halvorsen, Hanson, Harper, Hemmy, Hitt, Hoesly, Howard, Inman, Johnson, Kaiser, Kiefer, Koegel, Kostuck, Kretlow, Ludvigsen, Michalski, Millar, Mulder, Nehs, Nelson, O'Malley, Peterson, E. C., Peterson, T.

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A., Poltl, Pritchard, Robinson, Schenk, Schilling, Sieb, Siebert, Sigman, Stone, Theisen, Trego, Vaughan, Wegner, Weissleder, Woerth, and Mr. Speaker (Mr. Carow)—60.

Against granting chiropractors the "Doctor" title —Caffrey, Cavanaugh, Daugs, Fitzsimons, Foley, Garvens, Genzmer, Groves, Hamata, Jackson, Kelly, Kronschnabl, Krueger, Kryszak, Laack, La Bar, Meisner, Murray, Novotny, Peterson, R. W., Rakow, Shimek, Short, Swanson and Thomson—25.

Absent—15.*

* Mr. Laabs, Outagamie County, absent when the roll was taken returned to the Assembly chamber at the completion of the roll and asked to be recorded in the record to the effect that he would have voted against killing the bill had he been present.

Medical Library Service Fills Over Five Hundred Requests in April; Available to All

By MISS GLADYS RAMSEY

Librarian, The Medical Library Service, University of Wisconsin, North Charter Street, Madison

DISRAELI once said, "There are lies, damned lies and statistics"; nevertheless we dare quote figures to support our thesis that the Medical Library Service of the University of Wisconsin is rendering a real and progressive service to the medical profession of Wisconsin.

In poetic mood, one may have seen cardinals in the spring; in the month of April, the Medical Library Service staff with bread and butter practicality concerned themselves with requests five hundred strong, which deluge came from "way out there in the alfalfa" as well as from the metropolitan areas of Milwaukee and her sister cities. To continue to quote one of our borrowers expressing himself in humorous vein, "we just get some little thing learned and along comes some of them thar city Doctors with something better and we have to use our skulls again."

Miss Celia Harriman, and her able assistant, Mr. Sanford, replying to these five hundred requests for aid, sent out 1485 scientific books and journals in the month of April. This represents a volume of work not readily apparent to the average observer whose acquaintance with libraries consists of stepping into a public library and asking for a specific book or two, or at most a half dozen references on some current topic which may be handed across the counter with little expenditure of time or effort. Frequently the physician in writing his letter describes his case in detail, and asks for histories of similar cases, perhaps with a specific method of treatment. One such letter this month asked for a reference showing "probability of compound fracture put in position with immobilization of cast, becoming separated or displaced as the result of a jar while the patient was a passenger in an ambulance on the way home from the hospital where he had been confined eleven days." Articles on the general subject must be sought, and each article scanned so that irrelevant material may be eliminated. In obscure cases, perhaps only one article will have been published over a period of several years, and painstaking care must be exercised not to miss an important contribution to the literature.

That Miss Harriman and Mr. Sanford have accomplished an almost unbelievable volume of work (Mr. Sanford is employed only half time) is attested by the statistics of circulation; that they have done that work well is witnessed by the daily testimonials received from grateful physicians. April, 1935, has been the peak month in the history of the service; the year ending April, 1935, has been the banner year with a total of 5,174 requests and 13,940 pieces of literature loaned. Compare the year 1931 when there were 3,365 requests and 6,493 loans.

This service for the profession is in the largest measure due to the sympathetic interest of Dean C. R. Bardeen under whose guidance the service was instituted, and who has sponsored the work through a period of depression when funds were curtailed on every side. To him the success of the undertaking is directly attributable.

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Laryngoscope, 1935, XLV, 149-154★

SEE ALSO
Pharmacology of Inflammation: III. Influence of hygroscopic agents on irritation from cigarette smoke.
Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245★

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Governor La Follette Signs Medical Grievance Committee Bill

WISCONSIN now has a state Medical Grievance Committee composed of Dr. C. A. Harper, State Health Officer, Chairman; Dr. R. E. Flynn, Secretary of the State Board of Medical Examiners and James E. Finnegan, Attorney General. The new law, signed by Governor La Follette in May, is now Chapter 70, Laws of 1935.

Introduced as Assembly Bill 267 by Assemblyman William Groves of Lodi, Columbia County, the measure passed both houses by unanimous votes after the Joint Committee on Finance had attached an amendment to provide that expenses of the committee should be borne by existing departmental budgets rather than by a separate unlimited budget. It is not expected that the Committee will have its organization meeting until July or early August. The essential features of the new law follow:

The state health officer, the secretary of the state board of medical examiners, and the attorney general or deputy attorney general are hereby constituted ex-officio a state medical grievance committee, to investigate, hear, and act upon practices by persons licensed to practice medicine and surgery under section 147.17 that are inimical to the public health. The state health officer shall be chairman of the committee.

Meetings of the committee shall be held at the call of the chairman. Any member thereof shall have power to subpoena and swear witnesses, and take evidence. The committee shall have power to warn and to reprimand, when they find such practice, and to institute criminal action or action to revoke license when they find also probable cause therefor under criminal or revocation statute, and the attorney general may aid the district attorney in the prosecution thereof.

The records of said committee shall be kept by and be in the custody of the chairman thereof. No member of said committee shall receive any extra compensation therefor, nor other than his actual expenditures in attending upon his duties thereon.

The bill was introduced at the request of the State Medical Society of Wisconsin. It had been introduced two years previously but unsuccessfully. This year no opposition was met with the exception of an attempt by optometrists who desired to have the bill amended to include all osteopaths, chiropractors, dentists, optometrists, nurses, etc. This move was unsuccessful and the bill passed in its original form.

Assemblyman Groves conducted the floor leadership for the bill in the Assembly and appeared to fight for the measure in the Assembly and Senate committees.

The Journal Book Shelf

BOOKS RECEIVED FOR REVIEW

Clinical Management of Syphilis. By Alvin R. Harnes, M. D., Chief of Congenital Luetic Clinic, New York Hospital. Price $1.50. The Macmillan Co., New York.

Useful Drugs. Prepared under the direction and supervision of the Council on Pharmacy and Chemistry of the American Medical Association, 535 N. Dearborn St., Chicago.

New and Nonofficial Remedies, 1935. Articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1935. American Medical Association, 535 N. Dearborn St., Chicago.

A Textbook of Biochemistry. Edited by Benjamin Harrow, Ph.D., associate professor of chemistry, The City College, College of the City of New York and Carl P. Sherwin, M. D., member of the staff of St. Vincent's Hospital and French Hospital, New York City. Price $6.00 net. W. B. Saunders Co., Philadelphia.

Electrotherapy and Light Therapy. By Richard Kovacs, M. D., clinical professor and director of physical therapy, Polyclinic Medical School and Hospital, New York. Second edition, thoroughly revised. Price $7.50. Lea & Febiger, Philadelphia.

The Principles and Practice of Urology. By Frank Hinman, A. B., Leland Stanford Junior University; M. D., Johns Hopkins Medical School. Price $10.00 net. W. B. Saunders Company, Philadelphia.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

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Bee Venom Therapy. By Bodog F. Beck, M. D. D. Appleton–Century Company, New York.

The sting of the bee has been known for centuries to have some mysterious power of conferring upon many human beings an immunity from the rheumatic and arthritic diseases. Bee-keepers, as a class, are practically exempt from chronic arthritis. Numerous instances of spectacular cures following bee stings have appeared in the medical literature, especially in Europe, but the reports have been widely scattered and have received very little attention. Several European physicians, appreciating the value of bee venom in the treatment of rheumatic conditions, have from time to time during the past century achieved considerable success in the alleviation of symptoms in a large majority of the cases so treated and permanent cures in a fair percentage. For the most part, the medical profession has been extremely skeptical about the entire subject and has never accorded it serious consideration. Dr. Beck has approached the matter from a scientific viewpoint, and in his book discusses in detail the chemistry of the bee venom, its physiological action on the human organism, and its immunological reactions under the headings of decreased and increased sensitivity, anaphylaxis and allergy. The medical history of the bee and its venom is traced from the very earliest medical writings. One chapter contains an instructive discussion of the effects produced by bee sting injuries and their treatment, a subject completely ignored in most medical teaching. Another chapter deals with the medico-legal aspect of such injuries. Therapy of arthritic, rheumatoid and neuritic conditions by means of actual bee stings and by the more modern method of injecting standardized preparations of bee venom is presented in detail. The author makes no claim as to the ability of bee sting therapy to replace the present accepted methods of treatment, but feels that when maximum benefit has been obtained by the removal of all sources of infection and the correction as far as possible of metabolic disturbances and dietary deficiencies, the administration of bee venom may result in distinct additional improvement. It has been felt by some workers that the course of rheumatic fever can be definitely shortened and the incidence of cardiac lesions reduced by the prompt institution of bee venom therapy early in the disease.

The interesting manner in which the material is presented, the numerous illustrative cases and the author's delightful literary style all contribute to make the book pleasant and easy to read. The author realizes fully the opposition which such a treatise is bound to encounter but expresses the hope that a number of medical men will become sufficiently interested in the possibilities of this type of treatment to make a further study of it and lift it out of the hands of the laity where it now rests.

The reviewer, in a limited experience with this type of treatment, has seen a number of cases which have been definitely improved and a few in which the results have been spectacular, particularly in rheumatic fever with acute joint symptoms. Anything which offers a ray of hope in the alleviation of the intense suffering experienced by the multitudes of those afflicted with the painful and deforming lesions of chronic arthritis is worth looking into and bee venom therapy appears to be not without value. The book is highly recommended as the first really scientific treatment of this subject in either the American or European literature. The author is to be commended for his courage in attempting to elevate what has long been considered a "questionable" practice to the dignity of a true scientific study and for the skill with which he has handled a very difficult subject. C. M. K.

A Textbook of Surgery. By W. Wayne Babcock, M.D., professor of surgery and of clinical surgery in The Temple University. Cloth $10.00 net. W. B. Saunders Company, Philadelphia.

The second edition of this volume is a distinct improvement over the first one. It contains much new material which enhances its value as a textbook.

Special attention has been given to the recent advances in ductless gland therapy.

Of particular interest are the chapters dealing with thoracic surgery. Details heretofore unheard of in a volume of this type have been clearly and concisely stated. It should serve of unlimited value as a reference for practicing surgeons. J. W. G.

Physiology in Modern Medicine. By J. J. R. Macleod, M. B., Regius Professor of Physiology, in the University of Aberdeen, Scotland. Seventh Edition. Price $8.50. C. V. Mosby Company, St. Louis, Mo.

The seventh edition of Physiology in Modern Medicine maintains the high standard of this well known text-book. Several parts have been largely rewritten and many new developments in medical science have been incorporated. The work is eminently suitable for medical school classes and it may be particularly recommended to graduates who wish to review the modern application of one of the fundamental medical sciences. W.J.M.

Illustrative Electrocardiography. By the late Joseph H. Bainton, M. D., formerly attending physician and chief of the cardiac clinic, Morrisania City Hospital, New York, and Julius Burstein, M. D., associate electrocardiographer, Morrisania City Hospital. D. Appleton–Century Co., New York. Price $5.00.

This book is in reality an "album" composed of electrocardiographic records representing all of the arrhythmias and various cardiac conditions which are subject to analysis by electrocardiographic study. Several series of tracings taken at intervals following acute coronary occlusion are shown, illustrating the progressive changes characteristic of this condition as well as the method of determining the location of the infarct. The records are beautifully taken and for the most part are distinctly representative of the conditions which they are intended

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to illustrate. The book is right up-to-date and embodies all of the recent advances in its field. The arrangement of the material is excellent. The reviewer would recommend this monograph not to replace, but as an adjunct to a text-book. C.M.K.

The Romance of Exploration and Emergency First Aid From Stanley to Byrd. Chicago Century of Progress Exposition, 1934. Burroughs Wellcome & Co., 9–11 East 41st St., New York, N. Y.

A very interesting and instructive type of advertising prepared by Burroughs Wellcome and Company, which American pharmaceutical houses would do well to emulate. True the firm's name appears rather too regularly to admit of a disinterested purpose; but in scanning the pages of this brochure a growing appreciation of the medical requirements of exploration is gathered. W. S. M.

Surgical Pathology of the Peritoneum. By Arthur E. Hertzler, M. D., surgeon to the Agnes Hertzler Memorial Hospital, Halstead, Kansas. J. B. Lippincott Co., Philadelphia, Pa.

If Dr. Hertzler means what he says in many places, his conception of fundamental pathological processes differs so much from that of the reviewer, that the latter is left no common ground on which to meet the author. It may be that the statement "when there is extensive local suppuration caused by abstraction of albumin from the circulation" is a misprint but the reviewer can hardly go back of the printed word; and must leave the book with a quotation from the preface, to wit: "There is so much of assumption and bad logic in the writings on the peritoneum that to select the useful is no simple task". C. H. B.

New and Nonofficial Remedies, 1935. Articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1935. American Medical Association, 535 N. Dearborn St., Chicago.

As is to be expected in this annual publication of the Council on Pharmacy and Chemistry, are given descriptions of drugs, the status of which has not changed, together with newly accepted drugs, and in a number of instances, changes in specifications.

A. L. T.

Names of Surgical Operations. Compiled and arranged by the Western Surgical Association through its special committee. Edited by Carl E. Black, M. D., Jacksonville, Illinois. Price $3.00. Bruce Publishing Co., 2642 University Avenue, St. Paul, Minnesota.

This volume is an earnest effort on the part of the Western Surgical Association to clear the foggy state which now exists in the field of surgical operations. It shows painstaking and careful thought throughout. Its universal adoption is heartily recommended. J. W. G.

The Modern Method of Birth Control. By Thurston Scott Welton, M. D., editor of the American Journal of Surgery. Walter J. Black, Inc., 2 Park Avenue, New York, N. Y.

This volume is one of many that have been published recently explaining the Ogino–Knaus theory of periodic sterility and fertility. Written in simple language for the laity, it is readily understood and contains a number of menstrual charts which are unique in their simplicity. J. W. H.

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(Continued from page 403)

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By George H. Ewell, M. D.
James C. Sargent, M. D.
C. R. Marquardt, M. D.
ACUTE APPENDICITIS
By Albert Tormey, M. D.
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CHOLELITHIASIS
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TABLE OF CONTENTS PAGE 444

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● For over twenty years, intensive studies have been made of the stabilities of the vitamins under various conditions and treatments. Data accumulated indicate that certain vitamins contained in foods may, under specific conditions, be sensitive to oxygen in the presence of heat, or to heat or oxygen alone (1).

Broad details concerning vitamin stabilities are now general knowledge. The basic principle of commercial canning, namely heat sterilization of foods in sealed containers, is also generally known. As a consequence, there has been a tendency in some quarters to regard canned foods as deficient in certain, if not all, vitamins originally present in the raw material because of the conditions to which they were subjected during the canning procedures. Such a concept is not consistent with the established facts.

In future issues it is our intention to review the vitamin values of specific canned foods, as well as other nutritional virtues which they may possess. At this time we should like briefly to survey the matter of the stability of the most widely distributed vitamins during the canning procedure:

In general, vitamin A is not affected by commercial canning. This also appears true of vitamin G, as judged by present bio-assay methods for this complex dietary factor.

The stability of vitamin B_1 is dependent not only upon the heat treatment accorded it, but also upon the natural acidity of the food in which it is contained. In the more acid foods there is practically no loss of the vitamin during canning; in the less acid foods, which require longer and higher sterilization times and temperatures, the degree of retention is not as high.

Vitamin C is the most labile of all the vitamins; it is especially subject to destruction by open pan methods of cooking which permit free contact with atmospheric oxygen. In canning, however, the food is protected to a greater degree from contact with oxygen in the presence of heat; consequently the antiscorbutic factor is well retained in commercially canned foods.

Protective measures employed in commercial canning combine to insure that vitamins are retained in high degree. Such measures include the use of selected raw materials at the optimum state of maturity; prompt handling of the harvested crop; rapid inactivation of enzymes; removal of respiratory oxygen; and exclusion of air to a maximum extent during canning.

A fuller discussion of vitamin stabilities during canning procedures is not possible here. For further reading a recent publication dealing more in detail with this important subject is recommended (2).

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(1) The Vitamins, Sherman and Smith, The Chemical Catalog Co., New York, 1931.
The Vitamins; Browning, Bailliere, Tindall and Cox, London, 1931.
Vitamins, A Survey of Present Knowledge, Medical Research Council, H. M. Stationery Office, London, 1932.

(2) Ind. Eng. Chem. 24, 650 (1932)

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TABLE OF CONTENTS

ORIGINAL ARTICLES

Page

Hydrocele, Its Treatment by the Injection Method by George H. Ewell, M.D., Madison, James C. Sargent, M.D., Milwaukee and C. R. Marquardt, M.D., Milwaukee ---- 451

Acute Appendicitis by Albert Tormey, M.D., Madison ---- 456

Diagnosis and Treatment of Internal Hemorrhage by Dexter H. Witte, M.D., Milwaukee ---- 460

Surgical Problems Associated with Cholelithiasis by Robert S. Dinsmore, M.D., Cleveland, Ohio 467

Gastric and Duodenal Ulcers; Factors Essential to Their Successful Medical Management by George B. Eusterman, M.D., Rochester ---- 473

EDITORIALS

Three National Officers ---- 478

High Accomplishment ---- 478

Dr. William Shainline Middleton ---- 479

Medical History in Wisconsin ---- 480

The Annual Meeting ---- 481

MISCELLANY

Page

Society Proceedings ---- 482

Woman's Auxiliary ---- 483

News Items and Personals ---- 486

Charles R. Bardeen, M.D., 1871–1935 ---- 488

Deaths ---- 489

Births, Marriages ---- 490

Society Records ---- 490

Medical Economics ---- 490

Plans Completed for Ninety-Fourth Annual Meeting at Milwaukee, Sept. 17–20 ---- 492

Members—1935 House of Delegates ---- 493

Basic Science Exemption Bill Killed; Naturopathic Measure Fails in Assembly ---- 494

Assembly Votes 51–36 Killing Bill to Give Hospitals, Physicians and Nurses Right of Partial Assignment in Accident Cases ---- 496

Physicians and Hospitals Exempted from New Alcohol and Medicinal Liquor Fee; Out-of-State Purchases Approved ---- 504

Dr. Hunter New Director State Bureau of Maternity and Child Welfare ---- 506

Books Received for Review ---- 508

Book Reviews ---- 508

Exchange Advertisements ---- 511

[Entered as second class matter, June 30th, 1903, at the Post Office at Milwaukee, Wis., under Act of Congress March 3rd, 1879. Transferred to Madison, Aug. 1st, 1929.]
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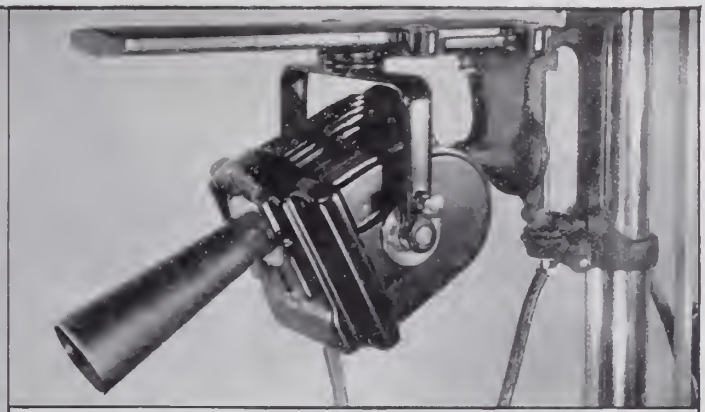

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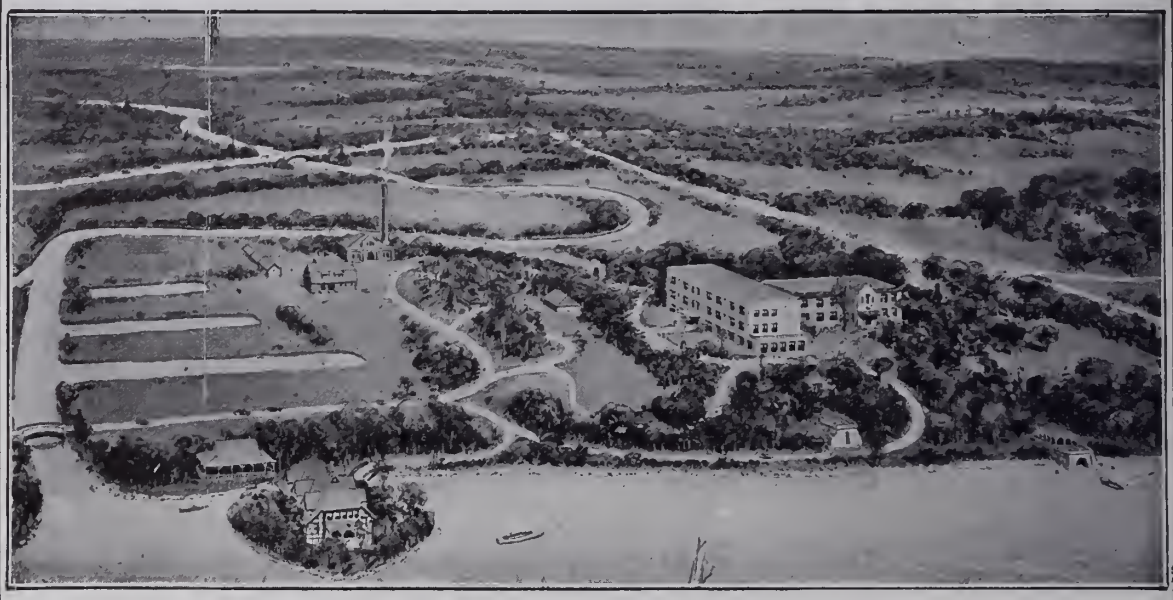

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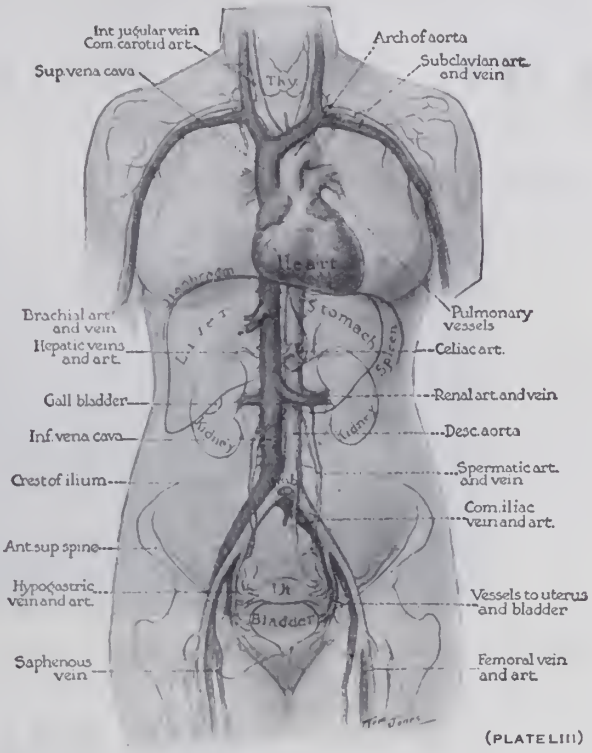

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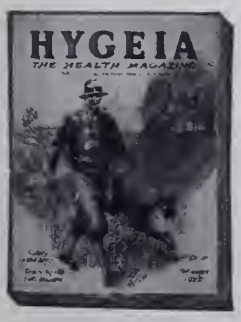

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THE WISCONSIN MEDICAL JOURNAL

Volume XXXIV JULY, 1935 Number 7

Hydrocele, Its Treatment by the Injection Method*

By GEORGE H. EWELL, M. D.
Madison

JAMES C. SARGENT, M. D.
Milwaukee

CHARLES R. MARQUARDT, M. D.
Milwaukee

THE treatment of hydrocele has varied but little during the past fifty years. Prior to the introduction of a designed surgical operation for the radical cure of hydrocele, treatment by the injection of caustic solutions had been the principle method in vogue. Since the results were generally rather unsatisfactory, surgery was readily accepted by the profession as the method of choice. In view of the recent experimental and clinical investigations of Kilbourne and Murray, it appears that the injection of certain noncaustic solutions promises to prove a very reliable and satisfactory procedure and that the failures and poor results in the past were due more to the type of drug used than to the procedure itself.

For the treatment of hydrocele numerous methods have been advocated, the injection treatment being one of the oldest employed. Celsus used a solution of saltpeter for injection and practised surgical excision of a portion of the sac.

Over the years other solutions were recommended for injection but not until the introduction of the use of tincture of iodine by Martin in 1832 did the method become at all popular. Many well known surgeons employed this method, several thousand cases being reported and a large percentage of cures claimed.

There were several important objections to treatment with this drug. It caused severe pain and disability, requiring hospitalization for several days in the greater portion of the cases. In a large number of cases there were recurrences and in the hands of the inexperienced abscesses and sloughing commonly followed. Hüter, in Germany, advocated the use of phenol and this drug was popularized in America by Levis. While pain following the use of phenol was less than with tincture of iodine, still pain, disability, abscess and sloughing frequently followed its use.

With the popularizing, in recent years, of the treatment of varicose veins by the injection of various sclerosing solutions and the development of new solutions for this purpose, there has been a revival of interest in the injection treatment of hydrocele. Several workers have employed the solutions used in the treatment of varicose veins in the treatment of hydrocele. Gray employed sodium chloride; Pybus, quinine hydrochloride and urethane in the same concentration as is commonly used for varicose veins; Sharma, quinine dihydrochloride with 5 per cent salicylic acid added; Porritt, also Levi, employed sodium morrhuate and reports success in 30 cases.

Floyd and Pittman treated twenty-four cases of hydrocele by injection, using quinine dihydrochloride in one, dextrose and saline solution in two, Varisol (a solution of invert sugar 30%, sodium chloride 10%, benzyl alcohol 1%) in one, glycerin in one, and sodium morrhuate in twenty, the latter in a 5% solution in a majority of their cases and later with 0.5% solution of phenol added with the idea of rendering the solution bactericidal. They feel that the sclerosing solutions will obliterate the sacs of acquired uncomplicated hydroceles and that the method is applicable to selected types of hydroceles.

Blavier treated eighteen patients using a solution of double chlorhydrolactate of qui-

* Read before the North Central Branch meeting of the American Urological Association, at Cleveland, Ohio, Nov. 9, 1934.

nine and urea, 25 parts to 100 of glycerine (Vendel's solution) and reports a cure in all cases. He noted reaccumulation of the fluid after the first treatment and sometimes after subsequent treatments. The injections were without pain. He concluded that the injections lead to a sclerosis of the wall of the hydrocele followed by total resorption of the fluid and feels that there is little danger in the procedure even though some of the solution is injected outside of the sac.

Kilbourne and Murray tried many of the preparations now advocated for the obliteration of varicose veins. After extensive experiments, they concluded that a solution of quinine hydrochloride, 13.33 per cent, and urethan, 6.66 per cent, was the most suitable for the injection treatment of hydrocele. The solution, they believed, met the requirements of an ideal solution which are:

1. It must be painless.
2. It must not cause disability.
3. It must be efficient in destroying all hydroceles without recurrence.
4. It must not be dangerously toxic.
5. It should be bactericidal.
6. It must not subject the patient to the danger of hemorrhage into the sac following the injection.

To these we would add one of our own. There should be little danger of injury to the testicle or epididymis.

Kilbourne and Murray reported their results in the treatment of thirty-five hydroceles. In three there was a very remote possibility of malignancy or tuberculous epididymitis and for them operation was advised. Thirty-two hydroceles were treated by the injection of quinine solutions. Four of these did not complete the treatments; eight were still under treatment at the time of making the report; twenty hydroceles in nineteen patients were apparently cured. Some were followed for almost a year. They state, however, that the apparent cure cannot be taken as final until the cases have been followed for a number of years.

They conclude that the treatment has avoided hospitalization except in two cases where pain followed the injection and the patients were given morphine and hospitalized over night. It has avoided confinement to bed and surgical complications. In no case was the injection followed by infection, violent tissue reaction, or hemorrhage and no patient was kept from work by the treatment.

Hydrocele is comparatively common, comprising from two to four per cent of the urological admissions to the average hospital. They may be classified as acute or chronic, symptomatic or idiopathic, and according to anatomical location following the plan of Jacobson into:

I. Hydrocele of the testis.
   1. Ordinary.
   2. Congenital.
   3. Infantile.
   4. Inguinal.

II. Hydrocele of the cord.
   1. Diffuse.
   2. Encysted.

III. Complications of I and II.

IV. Hydrocele of a hernial sac.

The fluid in an uninfected hydrocele is straw-colored, with a specific gravity of 1.020 to 1.026. It is rich in albumin and contains some globulin and fibrinogin. The reaction is neutral and alkaline carbonates and sodium chloride are present. It may contain a few leukocytes, endothelial cells, cholesterin, and at times fat and spermatozoa. It is thought to arise from an interference with the lymphatic or blood supply to the scrotal contents. However, this is not definitely proved. Caforio has pointed out that in view of the lower specific gravity and smaller serum content of transudates, hydrocele fluid is an exudate of inflammatory origin.

DIAGNOSIS AND TREATMENT

Before attempting any type of treatment it is, of course, necessary to employ all the well known means of establishing a diagnosis of hydrocele. Although the differential diagnosis is seldom difficult, at times it may be confusing. Hydrocele must be differentiated from the following: (1) Hernia; (2) Gumma; (3) Hematocele; (4) Spermatocele; (5) Chylocele; (6) Neoplasm,

In children hydrocele will often resolve spontaneously or after simple tapping.

Simple tapping is also advisable in acute hydrocele.

For chronic idiopathic hydrocele various surgical technics have been advocated depending upon the type of pathology present. Open operation has come to be almost universally employed except in those cases where surgery was not advisable under any circumstances. Young, Keyes, Eisendrath and Campbell in this country had all abandoned the injection treatment of hydrocele as being ineffectual and uncertain. However, their experiences were had with older drugs.

Radical surgery, incidentally, is not without complications. The average hospitalization of Campbell's series was 6.1 days in clean cases and 9.3 days in infected cases. Infection and hemorrhage were comparatively common and not infrequently castration had to be done as a last resort. Campbell quotes and incidence of infection either superficial or deep in 15 per cent of his operated cases. Keyes also stresses this point.

Recurrence, according to Sanford, occurs in 5 per cent of those in whom the radical operations have been performed. Barney, in a collected series of 1,216 cases in which all types of open operation were performed, found 30 relapses. A later investigation of 412 cases observed 22 relapses or 5.33 per cent. In a similar series treated by injection methods, the percentage of relapses was two and one-half times as great; that is, 6.1 per cent as against 2.4 per cent with open operation. It is to be assumed that the older types of sclerosing solutions were employed in the above cases.

One of the principal objections to the injection treatment of hydrocele is the possibility of overlooking coexisting pathology. However, with care exercised in the history and physical examination, this can be reduced to a minimum.

Campbell cites one malignancy in 502 cases operated on for hydrocele. Kilbourne and Murray had three suspicious cases in 35 hydroceles and consequently advised operation. The association is quite unusual and would offer no real objection to the injection treatment of hydrocele. However, if the aspirated fluid is bloody, operation is always indicated. The unusual malignancy, associated with a clear hydrocele fluid, should be detected by palpation of the testicle following aspiration, and collapse of the sac should be quite reliable in recognizing either tumor or tuberculosis.

Tuberculous epididymitis associated with hydrocele may also be confusing. However, this is also a rare clinical picture. Kilbourne and Murray found one case in 87 hydroceles treated at a certain hospital, and in this case the diagnosis was made prior to operation. In other cases which they traced in which hydrocele and tuberculous epididymitis were associated, the diagnosis was always evident.

In congenital hydrocele, when there is free communication with the abdominal cavity, open operation is likewise indicated. However, this association is also quite rare. Kilbourne and Murray found two cases of congenital hydrocele in a series of 231 cases. In both instances there was an associated hernia. They conclude that in the adult, in the absence of hernia, the danger of putting into a hydrocele sac a solution which might pass into the abdominal cavity is extremely slight, if it occurs at all. Other dangers associated with the injection treatment of hydrocele are toxicity to quinine and infections from nonbactericidal solution.

Quinine is relatively nontoxic. Many people have an idiosyncrasy to the drug; in most of them, however, toxic symptoms following its use are relatively mild. The greatest danger lies in the possibility of an injury to the auditory or optic nerves, especially the latter. Cases of optic nerve injury and blindness have been reported following the use of as little as 15 grains. The blindness in these instances, however, is only temporary. The amount of quinine used in the average hydrocele case varies from four to twelve grains.

We have not experienced any infection with the use of the quinine solution. Kilbourne and Murray found quinine and urethane bactericidal to staphylococcus aureus in a solution of 1 to 5 and quinine dihydrochloride in a solution of 1-5000. Sodium morrhuate, they felt, was not suitable for injection because it is nonbactericidal.

TECHNIC

We have employed the technic as outlined by Kilbourne and Murray, employing the same dosage and intervals between injections as they advocate. Briefly, this consists in infiltrating the point of puncture with procain hydrochloride. An 18-20 gauge needle is introduced by tunneling under the skin. This is done to prevent leakage of the quinine solution. The fluid is thoroughly aspirated and the scrotal contents palpated for evidence of tumor or tuberculosis. The fluid is examined miscropically for blood or pus. The injection is made through the same needle, care being taken that the needle has not slipped out of the sac as the scrotum contracts following drainage. Two cubic centimeters of quinine hydrochloride and urethane usually has been the initial dose. Fluid usually accumulates after the first injection; the treatment is then repeated in one week. If, following the second injection, the fluid reaccumulates and is not spontaneously reabsorbed within three weeks, the treatment is repeated.

Should epididymo-orchitis occur, as it did in five of our cases, the time interval between injections is lengthened to allow the inflammatory process to subside. A subsequent injection in one case caused no recurrence of the epididymo-orchitis. In many cases one injection usually suffices; however, two, three, or four injections may be necessary.

The reaspirated fluid in most cases is hazy and contains fibrin. At the end of a week, if the testicle is moved in the scrotum, there is a crepitant feeling not unlike the friction rub in pleurisy.

We have injected a total of 46 hydroceles in 39 patients. One of us, (GHE) has injected 18 hydroceles in 15 patients. In this series one case has been followed for two years and one month with no evidence of recurrence. This hydrocele has been tapped several times previously and one month prior to beginning of treatment. Of the remaining cases, a bilateral one—a transient patient—left the city after four months at which time there was no evidence of recurrence. The others are still either under treatment or observation which extends over a period of a few months to fifteen months in one case, and several over one year. All are apparently cured.

All of the patients have been treated as ambulatory with the exception of one from whom 1200 cc. of fluid was aspirated. This patient was hospitalized over night. In four or five instances pain following the first injection was severe enough to require aspirin by mouth. In one case there was a marked reaction to quinine, the patient stating beforehand that quinine by mouth would produce dizziness, ringing in the ears, etc. This hydrocele was of five years' duration, following an epididymitis which occurred after prostatectomy. There was a history of recent trauma and the patient presented an acute epididymitis and evidence of inflammatory reaction in the hydrocele at the time of the first observation. Simple aspiration was done and a week later the hydrocele fluid had again accumulated but was found to be clear on aspiration. Two cubic centimeters of quinine solution was injected. There has been no evidence of recurrence in fifteen months following the single injection. This hydrocele had been tapped several times prior to treatment.

In three cases epididymo-orchitis followed the third injection and in all cases rapidly subsided with no evidence, as yet, of reaccumulation of hydrocele fluid. In the one case, the hydrocele previously mentioned, containing 1200 cc. of fluid, was given 8 cc. of quinine and urethane solution at the third treatment. He then walked three miles to his home. In another case, the patient, a farmer, following the third treatment drove twenty-five miles and did his usual work the same evening. The third case had recurrent attacks of epididymitis following prostatic resection, the hydrocele developing subsequent to these attacks. Following the first injection, epididymo-orchitis developed which gradually subsided.

In the three cases, pain and tenderness were only mild or moderate, not being nearly as marked as in the ordinary case of epididymitis. While the patients were advised to stay off their feet, they were not incapaci-

tated and no patient had temperature at any time they were observed by me.

One case, a bilateral hydrocele, had been operated on on one side fourteen years previously. This recurrent hydrocele responded nicely to the injection treatment.

Two of us, (CRM. and JCS.) have injected 28 hydroceles in 24 patients. All are apparently cured, one case having been followed for fifteen months.

The shortest duration of a hydrocele in this series was six months and the longest duration was seventeen years. The fluid in all cases was clear and contained a few lymphocytes and endothelial cells and occasionally spermatozoa. Two cases followed gonorrheal epididymitis, another the repair of hernia, and two followed injury In the remaining cases, the cause was unknown.

One of the cases had been tapped and injected seven years prior with iodine and an acid preparation. He received one treatment with quinine hydrochloride and urethane with apparent cure. One of the cases, a boy age six, had an idiopathic hydrocele of eight months' duration. He had been operated on twice for the hydrocele six and seven months prior to injection. Thirty cc. of fluid was aspirated, examined for tubercle bacilli, and found negative. One cubic centimeter of quinine and urethane was injected. The next day there was an epididymo-orchitis with marked tenderness. With support and heat, recovery was uneventful and to date there has been no evidence of recurrence of the hydrocele. One other case of epididymo-orchitis occurred but did not require hospitalization.

Lacking specific information from the literature, we gathered this treatment would produce an obliteration of the sac by fibrous tissue formation. We have not followed our cases over a long enough period to be sure of this tissue change. However, we gained consent and opened up the cavity of the tunica vaginalis in one patient one month after the last treatment. He had three treatments with quinine hydrochloride and urethane and was clinically cured.

The sac was not obliterated. There was a small amount of dark amber fluid and several long loose strands of attached and organized fibrin. Grossly, the testicle and epididymis appeared normal. Microscopic sections of the tunic wall showed the endothelium to be intact. The blood vessels appeared normal, though the subserous tissue of the tunica was distinctly thickened and infiltrated with organizing fibrous tissue. From this study we suspect that the resulting fibrosis of the tunic wall following injection so interferes with the blood and lymph supply of the endothelium that in some way it alters the process of fluid formation or reabsorption.

There has been one recurrence, a patient with a moderate sized hydrocele (150 cc.) with recurrence after one month's observation. He had had seven treatments at weekly intervals. No further injections were given and open operation was resorted to as conemplated employment required that the hydrocele be eliminated before the patient entered upon his duties. At operation the testicle and epididymis were grossly normal and microscopic study of the tunica vaginalis showed a normal endothelium and some subendothelial fibrosis.

RESUME

1. The injection treatment of 46 hydroceles in 39 patients by quinine hydrochloride and urethane is presented. While our series is too small to draw any definite conclusions, the results are encouraging. There has been one recurrence. The longest period of clinical observation after injection has been twenty-five months.

2. Epididymo-orchitis followed the injection in five cases with no apparent deleterious effects. No other serious complications occurred.

3. The injection treatment may be employed in simple chronic hydroceles or in recurrent hydroceles. It is contraindicated in congenital hydrocele if there is suspected communication with the peritoneal cavity. It is contraindicated where pathology in the testicle or epididymis is suspected, such as tumor or tuberculosis.

4. Quinine hydrochloride and urethane probably does not act by obliterating the sac but rather by altering the process of fluid formation or reabsorption.

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Acute Appendicitis*

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IN 1905, John B. Murphy said: "Is it time to stop talking about appendicitis? No, it is just the time to begin talking about it and talk about it most seriously and emphatically." This statement is just as true today as it was twenty-nine years ago, and in recent years there has seldom been a medical meeting without some discussion of this subject.

We have heard a great deal about the increased mortality of appendicitis, but what have we done about it? Several surgeons have revived the treatment that Ochsner[1] advocated in 1901 when the mortality from peritonitis, following ruptured appendicitis, was from fifty to seventy per cent. To me this is a backward step. It is not getting at the cause of the trouble and I cannot agree with these men. They claim that it is dangerous to operate on cases seen after forty-eight hours, with or without a palpable mass, but that has not been my experience.

One of the most prominent advocates of the delayed operation is McNeill Love,[2] who states that: "Surgical interference appears to be particularly dangerous during the third to fifth days inclusive. During this period natural immunity to infection is exhausted and acquired immunity has not been established,—that is, the patient is in a 'negative phase'." He claims that immediate operation is more frequently responsible for various complications and sequelae; that drainage is required oftener with consequent fecal fistula; that secondary abscesses and hernia are commoner; and that the mortality is higher. Again, I cannot agree with these statements. He adds however, "that it is generally agreed that expectant treatment is not suitable for children or the aged, and that it is only advisable if efficient nursing is available and the patient is under the constant supervision of the surgeon. Needless to say, if any doubt exists regarding the diagnosis, expectant treatment is not desired."

TABLE I—AGE—SEX

Age Groups	Male	Female	Total
0— 9	6	7	13
10—19	23	35	58
20—29	30	30	60
30—39	24	9	33
40—49	14	7	21
50—over	11	4	15
Total	108	92	200

Youngest patient ---------- 4
Oldest patient ---------- 73

From January 1, 1932, to July 1, 1934, my brother and I have operated upon two hun-

* Read before the 93rd Anniversary Meeting of the State Medical Society of Wisconsin, Green Bay, Wisconsin, September 12-14, 1934.

TABLE II—AGE—CONDITION—DRAINAGE—MORTALITY

Age Groups	Inflammation Limited to Appendix	Abscess or Local Peritonitis	General Peritonitis	Tube Drainge	Only Peritoneum Closed	Total		Mortality Per Cent
						R	D	
0— 9	7	6	0	4	1	13	0	0
10—19	40	13	5	9	3	58	0	0
20—29	39	16	5	11	3	60	0	0
30—39	23	6	4	7	2	32	1	3.3
40—49	13	5	3	5	2	20	1	4.7
50—over	4	8	3	9	3	15	0	0
Total	126	54	20	45	14	198	2	1.0

Appendectomy performed ---------- 199
Appendectomy not performed ---------- 1

dred cases of acute appendicitis without the advantages or disadvantages of delayed treatment. Table I shows that this small series consisted of one hundred and eight males and ninety-two females ranging in age from four to seventy-three years of age. Table II shows that in one hundred and twenty-six of these cases the inflammation was limited to the appendix. These specimens were all examined by a competent pathologist, and the diagnosis verified. No cases of subacute, or the so-called "interval" appendix is included in this report. In fifty-four cases—an abscess or local peritonitis was treated and in twenty cases we had to deal with diffuse and progressive peritonitis. An immdeiate operation was performed in each and every one of the two hundred cases and the appendix was removed in all save one where drainage was instituted. We had but two deaths from peritonitis or a mortality of one per cent (1%) for the series and ten per cent (10%) for the cases with general peritonitis at the time of operation. If we had delayed operation in these cases I feel sure that our mortality would have been considerably higher. This low death rate is not unusual among surgeons who operate carefully, and closely observe the postoperative course of their patients. Gile[3] has recently reported one hundred and ten cases without a death. Table IV shows the results of several surgeons who advocate early operation and whose mortality varies from zero to four and six-tenths per cent (4.6%).

Who is there amongst us who can prophesy just what is going to happen in an acute abdomen caused by a gangrenous ruptured appendix, as long as this focus of infection is allowed to remain within the peritoneal cavity? Who can be sure that a spreading peritonitis will localize in the right lower quadrant? Who can be sure that if an abscess does form that it will resolve? In these days of economic stress how many of our patients can afford the prolonged hospitalization that such a method requires?

Even the most enthusiastic advocates of this method admit that "The delayed treat-

TABLE III—POSTOPERATIVE COMPLICATIONS

Wound Infection	15
Paralytic Ileus	5
Secondary Suture	4
Intestinal Obstruction	2
Fecal Fistula	2
Persistent Hiccough	2
Broncho Pneumonia	2
Phlebitis	2
Lobar Pneumonia	1
Cystitis	1
Measles	1
Total	37

TABLE IV—MORTALITY OF VARIOUS SURGEONS

Author	Total	Recovered	Died	Mortality
Garlock[7] 1934	433	413	20	4.6
Christopher and Jennings[3] 1934	1138	1091	47	4.13
Quain[9] 1934	1000	962	38	3.8
Arnheim and Neuhof[10] 1934	173	168	5	2.8
Gile and Bowler[3] 1934 (2 groups)	791 110*	774 110	17 0	2.5 0

* Controlled Cases — Dick Hall's House — Dartmouth College.

ment of appendicitis must be carried out on the threshold of the operating theatre, by the surgeon himself, for at any moment operation may become imperative". Love admits that in twenty-five per cent (25%) of his cases abscess formed and he had a mortality of four and five-tenths per cent (4.5%), while in ten per cent (10%) expectant treatment had to be abandoned with a resulting mortality of six per cent (6%).

I was pleased to find that the text books used in our medical schools favor early operation.

Homans[4] states that "Forty-eight hours usually covers this stage of development, during which perforation may or may not take place. From then on, from the third to the fifth day, if the process appears to be localized, an operation may be properly performed, but is frequently delayed on the ground that the natural defenses against the spread of peritonitis are likely to be harmed rather than helped by interference. If, however, from the third day on, the infection is clearly spreading, and the patient's general condition is still reasonably good, operation, which can at least remove the septic focus, *should not be withheld.* But patients suffering from diffuse peritonitis, and obviously *so ill that they seem unlikely to survive an operation* are given *what is perhaps* their best chance under conservative treatment".

DaCosta[5] says that "Appendicitis cases which are so far advanced in general peritonitis when seen by the surgeon some operators decline to touch. If we make a custom of operating on such cases, we will lose very many, but will save a few, and these few would have died if we had not operated. To *operate spoils statistics but occasionally saves lives.*"

"The operation should consist of a simple incision to relieve tension and afford exit to infected fluids—rapid removal of the appendix if it is *easily accessible*, otherwise leaving it alone—and drainage of the pelvis."

Ross and Carless[6] are very emphatic. They state that "In the gravest variety of *fulminating appendicitis*, associated with diffuse septic peritonitis, the only hope of recovery lies in immediate operation. Whenever the attack starts with severe pain, frequent vomiting and early collapse, whilst the abdomen, though not distended, shows marked signs of rigidity, and especially if on the left side, *operation must not be delayed.* In such cases the appendix is either gangrenous or perforated, and thus every hour adds to the mischief, or it is acutely distended with muco-pus and may perforate at any moment, giving rise to a general infection."

PREOPERATIVE TREATMENT

If the patient has peritonitis and is in a serious condition on his arrival at the hospital, it is well to wait a few hours before operation giving him intravenous glucose or a small blood transfusion. Routine preoperative enemas should not be given.

We have used spinal anesthesia in about fifty per cent (50%) of these cases and think it is the anesthetic of choice.

OPERATIVE TECHNIQUE

We generally use the right rectus incision —sometimes splitting the muscle and at other times retracting the muscle medially. We feel that this incision should be from four to five inches or more in length to give adequate exposure. In cases of a well developed mass, we make the incision immediately over it regardless of its location and remove the appendix if *it is accessible.* In some cases with a retrocecal appendix and abscess formation and with a congenitally fixed caecum, it is much better judgment to simply drain the abscess and not attempt an appendectomy. In these difficult cases it is frequently the young inexperienced surgeon who is responsible for the high death rate. We must admit that at times they act like the proverbial bull in a china shop. They are not content with drainage, but must get the appendix out at any cost. They break up fresh adhesions, spreading the infection throughout the abdomen and if the patient does not die from peritonitis, severe complications are sure to follow.

In cases of free fluid or actual pus we always use the suction apparatus, followed by special cigarette drains, one placed in the pelvis and one at the stump of the appendix. If the appendix was retrocecal and pointed toward the liver we place a drain there. We are always careful to see that the omentum

lies close to the drains and that they do not come in contact with the loops of small bowel.

In fourteen of these badly infected cases only sufficient sutures were introduced to close the peritoneum beside the drains. The rest of the wound is left open, or occasionally packed with vaseline gauze and held with two silk worm gut tension sutures. There is neither slough nor necrosis with this method as occurs with a colon infected wound, and it granulates rapidly. The incidence of incisional hernia is definitely diminished.

POSTOPERATIVE TREATMENT

After the operation is over and the patient is back in bed we begin a modified Ochsner treatment. The head of the bed is elevated from twelve to twenty-four inches and kept that way for several days. Morphine is given in sufficient quantities to keep the patient quiet and to depress the respiratory rate. No liquids are given by mouth, but the patient is encouraged to chew gum. Between 3000 and 4000 cc. of saline and glucose are given intravenously and subcutaneously every twenty-four hours. If there is a well developed peritonitis, with paralysis of the bowel, the stomach is kept empty by an indwelling gastric tube under constant suction, and frequently lavaged with water at 110°F. Low enemas and stupes are frequently employed. This treatment is continued as long as it is necessary, depending upon the progress of each case. It is very essential for the surgeon to be on the alert for postoperative complications and I attribute our success with these cases to the personal supervision each one received from the day he entered the hospital until he was discharged.

Table III shows that we had thirty-seven important postoperative complications which were treated promptly and followed by complete recovery. Major wound infection was the most common. This can be greatly reduced by carefully protecting the abdominal wall during the removal of the appendix, and inversion of the stump, and by discarding all instruments used in the procedure. Secondary suture in these cases during the third week will hasten recovery, and give a good firm scar.

Two of the most important complications met with are paralytic ileus and mechanical intestinal obstruction. At times it is difficult to distinguish between the two, but as a general rule the patient whose pulse and temperature continue to rise, whose abdomen remains distended and there is no sign of peristalsis, and who is mentally alert,—he has a paralytic ileus. As stated before, this complication should be treated by the indwelling Levine tube—intravenous and subcutaneous saline and glucose, stupes and enemas.

Mechanical intestinal obstruction is usually a late complication, appearing about the seventh or tenth day. The patient has usually recovered from the effects of his operation when he suddenly complains of severe intermittent abdominal pain followed by nausea and vomiting. The pulse becomes rapid and there is active peristalsis. Enterostomy is indicated and frequently a life-saving measure. If the patient is in reasonably good condition, however, and the obstruction is diagnosed early, a laparotomy may be performed and the obstruction released. The point I wish to again make is that if the surgeon is watching the postoperative course of his patients closely, he should be able to make an early diagnosis of these very severe complications and treat them properly before it is too late.

We have found that repeated blood transfusions in general peritonitis is a great help. Some men recommend antigas-gangrene serum, but we have not used it.

COMMENT

In 1930, the death rate from appendicitis in the state of Wisconsin was eighteen and two-tenths per cent (18.2%) per one hundred thousand population. This dropped to thirteen and seven-tenths per cent (13.7%) in 1933 which means that four hundred sixteen citizens died.

What can we do to lower this high mortality rate? Advocating delayed operation or conservative treatment will not do it. Why not follow the excellent advice Oschsner gave in 1901 when he said: "The laity should be taught to stop feeding and giving cathartics to patients suffering from intra-abdom-

inal diseases." We have educational campaigns against cancer and the communicable diseases, why not against appendicitis?

In my opinion we must adopt the Philadelphia plan, as already proposed by our officers in cooperation with the State Board of Health and the Pharmaceutical Association. In order that this campaign be successful it must have wide publicity—the public must be made "appendicitis conscious". Placards have been distributed to fourteen hundred druggists in Wisconsin warning them about the use of laxatives in the presence of abdominal pain, and some few to physicians. This is a good start, but I believe it should be taken up intensively by each county medical society and talks be given in every high school and service club in the state. In Philadelphia the following stickers were distributed directly to high school pupils with the request that they stick them on a book they use daily:

WARNING

In the presence of abdominal pain
Never give a laxative
Give nothing by mouth
Apply ice cap or hot water bottle
Abdominal pain which lasts more than
six hours is usually serious.

As a result of this campaign, the mortality from appendicitis in Philadelphia dropped from thirteen and nine-tenths per cent (13.9%) per one hundred thousand in 1931 to eleven and three-tenths per cent (11.3%) in 1932. I am confident that we can do the same in Wisconsin.

SUMMARY

1. Two hundred cases of acute appendicitis operated upon in the past thirty-six months with a mortality of one per cent (1%) are analyzed.

2. The writer advocates immediate operation, and is opposed to the so-called delayed treatment.

3. Spinal anesthesia and a large incision permitting easy vision of the appendix simplifies the operation.

4. Early recognition and prompt treatment of postoperative complications is essential.

5. To reduce the mortality of appendicitis we must educate the public

(a) To realize that appendicitis is a surgical disease requiring prompt operation.

(b) That there is a great danger in the administration of cathartics in the presence of abdominal pain.

(c) Care should be exercised in selecting the surgeon.

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Diagnosis and Treatment of Internal Hemorrhage*

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INTERNAL hemorrhage may be strictly construed to mean only hemorrhage into the cranial, thoracic or abdominal cavities or into the tissues. In another sense it may be considered to refer to bleeding from any internal organ even though the blood may subsequently pass through normal channels to become external. It is my purpose to accept the broader definition and briefly to discuss some of the more frequent of this type of hemorrhage with special reference to bleeding from the gastro-intestinal tract and its treatment. Obviously time will not permit a full discussion of all types that might be considered under this heading.

It is, of course, not necessary to mention the great difference in the picture presented

* Presented before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, September 1934.

by acute hemorrhage from that found in chronic hemorrhage. We are all familiar with the striking appearance of the person who has suffered sudden acute hemorrhage. The marked pallor, great shock, rapid pulse, lower blood pressure, increased thirst, subnormal temperature, anxious facies or subsequent lethargy are classical. The patient suffering from chronic hemorrhage does not present as striking a picture although the pallor may be pronounced.

The red blood count definitely tells the story. In this connection I may mention that the theoretical average for women of 4,500,000 cells per cubic m.m. and for men of 5,000,000 is subject to normal variation of from one-half to one million. It is well to remember there may be a normal variation of as much as 500,000 in counts an hour apart. I may add that the finding of the long narrow blood cell known as the "pencil" cell on a slide is almost certain indication that chronic hemorrhage is taking place.[1]

Of course, a low red blood count means anemia rather than hemorrhage, and before one can diagnose hemorrhage he must rule out other conditions which produce anemia. I wish to emphasize that in cases of sudden severe hemorrhage the red blood count and hemoglobin may be almost normal at first. The reason is that sufficient time has not elapsed for the blood to be diluted by the comparatively rapid replacement of the liquid portion. There commonly is a rapid leucocytosis. I have seen a white blood count of 40,000 within a few hours after rupture of an ectopic pregnancy.

Cerebral hemorrhage is excluded from this paper for the reason that it presents a picture quite different from other forms of hemorrhage. Intra-thoracic hemorrhage may be dismissed with a few words. It is practically always due to trauma, neoplasm, tuberculosis or rupture of an aneurysm. History, physical findings, x-ray and aspiration of blood from the chest make diagnosis usually simple. The treatment, if any is possible, will vary with the cause.

In the abdominal cavity one of the common causes of hemorrhage is trauma. Any viscera may be injured in such a way as to produce either slow or exceedingly rapid hemorrhage. In this connection it is well to remember that fatal hemorrhage may result from an injury which leaves no external evidence on the skin. I recall one case where there was a fatal hemorrhage from a small traumatic rupture of the inferior vena cava, without any external sign of injury. The patient with traumatic abdominal hemorrhage commonly presents the picture of extreme shock; the abdomen is usually excruciatingly tender; the walls are as a rule rigid and there can usually be detected signs of free fluid in the belly. It is impossible at this time to discuss the differential diagnosis and treatment of the various injuries which may produce intra-abdominal hemorrhage.

The most common cause of non-traumatic hemorrhage into the peritoneal cavity is ectopic pregnancy. The patient who has suffered a ruptured tubal or ovarian gestation presents a fairly typical picture familiar to all of us. A suggestive history can usually be obtained. There has been some bloody uterine discharge following the last menstruation; a period or two may have been missed, and there has as a rule been severe, knife-like pain in the lower abdomen together with one or more fainting spells. She is in more or less shock and is usually quite apprehensive. The lower abdomen is rigid and extremely tender. Presumptive signs and symptoms of pregnancy may or may not be present. The blood count usually shows an anemia, perhaps profound, and a leucocytosis. Where all of these symptoms exist, diagnosis is not difficult and immediate operation is performed.

Many cases have recently been reported of pelvic hemorrhage due to rupture of Graafian follicles, corpus luteum or other ovarian cysts.[2] These cases present the same physical findings as those of ectopic pregnancy, though the history does not point toward gestation. There is usually the same sudden pain, fainting, shock and prostration. Preoperative diagnosis is rarely if ever made and it is almost impossible to differentiate this condition from that of ectopic gestation. However, one author states this differentia-

tion is more a matter of medico-legal than clinical importance for the treatment, immediate operation, is the same.

Four years ago I had one case that was definitely of this type. A woman of twenty was taken from a train passing through Milwaukee. When she reached the hospital she was in collapse and presented the typical appearance of severe hemorrhage. She had suffered sudden severe pain in the lower abdomen about one hour before examination. There was marked anemia; the abdomen was rigid and extremely tender; the hymen was intact. At operation the abdomen was found full of fresh blood and the right ovary was involved in a recent clot. Removal of the clot exposed the site of bleeding, which, upon subsequent examination, was found to be a ruptured Graafian follicle. I am not at all certain that several cases in which I have made matter-of-fact diagnoses of ruptured ectopic pregnancies may not have been ruptured follicles or cysts, for no positive evidence of pregnancy was found.

Numerous cases of hemorrhage from ruptured corpus luteum cysts have been reported and this condition must always be borne in mind when making a diagnosis of ectopic pregnancy. Such cysts are easily ruptured and may cause hemorrhage. I had a rather startling experience in my office a few months ago. Examining a patient of thirty-three upon whom I had previously done a supra-vaginal hysterectomy for fibroids, I found a cyst of the left ovary the size of a lemon. While out-lining the cyst by bi-manual examination it suddenly collapsed. The patient experienced no unusual sensation other than some abdominal pain. In this case there was no evidence of internal bleeding and she was permitted to go home. She suffered no subsequent discomfort and recent examination does not indicate any recurrence of the cyst.

A number of cases[3,4,5] have been reported where extreme intra-peritoneal hemorrhage has occurred through rupture of varices on the walls of fibroid uteri. These cases may present the clinical picture of ectopic pregnancy, although of course there is no sign pointing to gestation except the enlarged uterus.

Numerous reports have been made of intestinal and intra-peritoneal hemorrhage following surgical operations especially those for pus appendicitis.[6] The bleeding in these cases results from septic thrombosis and emboli. It is well to bear this fact in mind when postoperative pus cases suffer an otherwise unexplainable relapse.

The danger that a Caesarean section case may suffer rupture of the uterus during a subsequent pregnancy has been emphasized for years. It is mentioned here only that I may record an interesting case. Mrs. E. C., age 31, had a classical Caesarean three years ago at full term because of a contracted pelvis. Postoperative convalescence was entirely normal and the wound apparently healed perfectly. She again became pregnant last fall and had made arrangements to have a second Caesarean performed April 15, 1934, two weeks before the probable date of confinement. March 4th, she telephoned from Chicago that she had suffered peculiar bearing down pains and was taking the next train to Milwaukee. While on the train she suffered a number of very severe abdominal cramps and reached Milwaukee in a state of collapse.

She was immediately taken to a hospital for examination. Her pallor was extreme; the pulse rapid and weak and the entire abdomen rigid. Abdominal pain was almost unbearable and it was quite evident that there had been some severe intra-abdominal accident. Operation was immediatley done, the old Caesarean scar being excised. The abdominal cavity was partially filled with blood. The anterior surface of the uterus was covered with a large hematoma between the uterus and adherent omentum. Liberation of the omentum revealed a large rupture of the uterus through the old scar. Plugging the opening in the uterus was a seven-month-old male fetus, while a second fetus was found within the uterus. That fatal hemorrhage had not taken place was due to the adherent omentum and the fact that one of the twins was wedged firmly in the uterine tear. I may add that the mother and one of the twins survived this rather unusual ordeal.

GASTRO-INTESTINAL TRACT

Hemorrhage from the gastro-intestinal tract often challenges our diagnostic as well as therapeutic skill. Manifesting itself as blood appearing in either vomitus or stool, it demands that careful search be made for its origin. There is an old rule of thumb that vomited bright red blood comes from the esophagus or high up in the stomach; coffee-ground blood from near the pylorus; that bright red blood in the stool comes from near the anus, while black tarry blood comes from high up in the intestinal tract. Often true, this rule can not be implicity followed. At times the greatest diagnostic skill aided by most modern laboratory instruments will fail to reveal the exact source of a gastro-intestinal hemorrhage.

Nothing will more alarm a patient than a sudden severe gastric hemorrhage accompanied by the vomiting of an amount of blood which always seems greater than it is. Such an accident may produce the typical picture of hemorrhagic shock previously described. On the other hand a patient may be unaware that he is bleeding and seek relief because of pallor, weakness or black stools.

Several years ago I was called by a physician to see his twenty-three-year-old son, who gave the following history: Always in excellent health, he had several days previously complained of feeling listless and tired. The preceding day he chose to remain at home in bed rather than attend a Fourth of July picnic, always an alarming symptom in a young man. Physical examination was entirely negative until the shades were raised in the darkened bed-room, when extreme pallor was evident. The color of the stools had not been observed but a movement at the time of examination was found to be black. He was immediately taken to a hospital where his hemoglobin was found to be but 30% with a red count slightly in excess of 2,000,000. Immediate blood transfusion was done and the abdomen packed in ice. A tentative diagnosis of dudenal ulcer was made in spite of the absolute absence of any history of previous stomach or digestive trouble. After a second transfusion he was started on a Lenhartz diet. There was no further evidence of bleeding after two days. The blood picture improved rapidly and after an interval of three weeks it was deemed safe to make complete gastro-intestinal x-ray examination, which revealed a small duodenal ulcer. Under dietary treatment the patient rapidly gained in strength and several months later a second x-ray examination showed no evidence of ulcer. He has never since had any symptoms of ulcer. This case is of interest because an almost fatal hemorrhage took place from a duodenal ulcer which never produced any typical ulcer symptoms.*

Unfortunately for our diagnostic reputation at times, not all vomited blood comes from a gastric or duodenal ulcer. In the absence of a definite ulcer history such a diagnosis is only presumptive. We must rule out blood swallowed from the naso-pharynx, or from a pulmonary hemorrhage; extreme hemorrhage may occur from a ruptured esophageal varix such as is found in cirrhosis of the liver. Systemic disease such as pernicious or splenic anemia, leukaemia, haemophilia or jaundice may be responsible. Foreign bodies and poisons must be thought of. Mention is made of these conditions merely as a warning against too easy acceptance of gastric hemorrhage as positive evidence of the existence of an ulcer of stomach or duodenum. As a rule careful consideration of history and physical and laboratory (including x-ray) examinations will lead to correct diagnosis. There are cases, however, in which even most careful search fails to reveal the source of bleeding[7].

Allen and Benedict have recently reported a series of 138 cases of sudden severe massive hemorrhage which occurred in a series of 1804 cases of duodenal ulcer[8]. There were 62 other cases which suffered chronic bleeding. Of the 138 cases of severe sudden bleeding twenty died, twelve without operation and eight after operative interference.

Erosion into a large artery was commonly found to be the cause of bleeding. They describe a typical case: "The ulcer has been on the posterior wall of the duodenum where it overlies the pancreas. It may have started on the anterior wall or superior margin, in-

* Since the presentation of this paper, this patient had a similar hemorrhage in March, 1935.

volving the posterior surface secondarily. At late operation or at autopsy one finds the entire posterior surface of the duodenum missing to the borders of the ulcer and the bed of the ulcer consisting of eroded pancreatic tissue. Either at the superior margin or in the crater of the ulcer one finds a large exposed vessel with an opening of sufficient size to admit an ordinary probe. During operative attempts to cope with this situation, blood spurts from the open vessel at an alarming rate."

Once the diagnosis of bleeding gastric or duodenal ulcer has been made, determination of proper treatment is not always easy. Supportive treatment must, of course, be given at once, and more will be said of this later. Whether to operate or not must be determined as soon as initial shock has passed. If operation is to be done it may not be possible to decide what type of operation will be done until the abdomen is opened.

Most authorities are agreed that recurrent hemorrhage in a known chronic ulcer case is a definite indication for surgical treatment. In such cases it may suffice to do a gastroenterostomy or pyloroplasty, although many surgeons advise a more radical operation, including resection of the ulcer if possible. It is my opinion that no hard and fast rule can be laid down and that decision must depend upon these three factors: (1) the general condition of the patient; (2) the pathology found and, (3) perhaps most important of all, the skill and experience of the operator.

When it comes to the question of immediate surgical interference in a case of sudden severe gastric hemorrhage where there is no history of previous bleeding we find a wide difference of opinion,[8, 9, 10, 11, 12, 13, 14, 15] Some insist that every grave gastro-duodenal hemorrhage in a known ulcer case, even if there is no history of previous bleeding, be considered as requiring emergency surgery. Others favor conservative treatment of an initial hemorrhage even in the presence of an ulcer history. Certainly it appears that an initial hemorrhage, though severe, when ulcer is not known to exist, should not be subjected to an operative search for the source of the bleeding.[7]

In this connection another quotation from Allen and Benedict is of interest. Speaking of known ulcer cases they say: "It has been more or less commonly believed that patients would be more likely to recover from their first attack of severe bleeding than they would if there had been previous periods of bleeding. In the twenty total (fatal) cases, twelve had not bled previously, seven had bled once before, and one died during his fifth bleeding attack. Of those who recovered, seventy-eight had not bled before, twenty-five had bled once and fifteen had had two or more such attacks."

It seems apparent that each case must be considered as an individual problem. Not the least important factor in determining whether emergency surgery shall be done is the ability of the surgeon at hand. Not all of us have had the opportunity to acquire the technique which might enable another successfully to do a radical resection on an exsanguinated patient. Years of experience and perhaps some natural aptitude are required for that. But all of us can easily acquire the technique needed for non-operative treatment which succeeds so often. This treatment is equally effective in hemorrhage from other locations in the gastro-intestinal tract; discussion of diagnosis in such cases is omitted because of time limitations.

The immediate treatment comprises: (1) absolute rest; (2) sufficient morphine to keep the patient quiet; (3) absolute starvation; (4) ice bag to stomach with hot water bottles to feet and legs: (5) replacement of essential elements of lost blood by transfusion, intravenous saline-glucose or adiministration of iron.

There is little disagreement regarding the use of the first three,—rest, morphine and starvation. Some object to the use of ice for the reason that more or less shock is always present and they feel that further lowering of temperature by ice bags is objectionable; there is some truth in this but the objecton can be overcome by liberal application of heat to the extremities.

SECONDARY ANEMIA

Considerable misunderstanding exists with regard to the use of iron in secondary anemia. I wish to correct two common fall-

acies. Inorganic iron is as valuable as organic, and there is no advantage in giving iron intravenously; it may just as well be given by mouth.[1] Iron, organic or inganic, enters the red blood cell during its formation in the bone marrow. To reach bone marrow, whether taken by mouth or injected into the blood stream, it must be taken up by phagocytic cells of the liver—there digested and made soluble, discharged into the intestine, absorbed by the blood and carried to the bone marrow where it is used in the manufacture of hemoglobin. The two best forms of iron to use appear to be the soluble iron and ammonium citrate in aqueous solution and ferrum reductum given in capsules. But the dose should be much larger than the U.S.P. specifies, i.e., one teaspoonful of 50% solution of the citrate or, if this causes diarrhea, 7½ grains of reduced iron, three times a day. The usual iron patent medicine contains a fraction of one grain per ounce.

Some object to intravenous introduction of blood or saline substitutes unless it is certain that all bleeding has stopped. Their objection is based upon the thought that the lowering of blood pressure produced by hemorrhage is what brings about cessation of bleeding.

I am in complete disagreement with this point of view. Lowered blood pressure is but a small factor in the clotting of blood. Whatever virtue it has is more than offset by the dangers of hypohydration produced by the loss of blood fluids. Fantus has an excellent discussion of hypohydration and hypochloridation in the June 30, 1934, issue of the J. A. M. A., which I urge you to read.[16]

As soon as severe gastro-intestinal hemorrhage has been diagnosed, I believe immediate efforts should be made to replace the lost blood. Blood transfusions are best for this purpose, but while waiting for the donor intravenous infusion should be done. If the fluid is given slowly enough to permit counting of the drops through a drip tube there will be no danger of a "speed shock" reaction or of an objectionable rise in blood pressure. Solutions of dextrose and saline, properly prepared for intravenous use, are carried by most hospitals and are now commercially available through drug houses. The J. A. M. A. advertises a line of Council-Accepted intravenous solutions which are available in sterilized containers and may be kept on hand for emergency use. Saline may be given first; later, better to combat thirst and to supply nourishment during starvation, dextrose should be substituted or added. The addition of acacia is valuable when blood pressure is dangerously low. In extreme cases a canula should be inserted and the fluid given constantly in the amount of 2,000 to 3,000 c.c. daily.

If a proper donor can be secured, blood transfusion should be done for there is no complete substitute for blood. For this purpose the citrate method is preferable for the following reasons: It is so simple that any one who can puncture a vein can use it; the blood does not need to be given rapidly; the patient need not be moved to the operating room, for the blood may be taken from the donor and safely carried to the patient's room; sodium citrate possesses the paradoxical merit of preventing clotting in vitro and hastening clotting in vivo[17, 18]; and, finally, Isaacs has shown at Michigan that so-called whole blood has no advantage over citrated blood for transfusion purposes.[1]

I wish to urge in every possible way the more frequent and general use of citrated blood by transfusion in the treatment, not only of hemorrhage, but of all conditions where convalescence is delayed by lack of blood. No great surgical skill is required and no elaborate apparatus is necessary. All that is needed are two fairly large needles, a syringe to aid in their insertion, a large beaker in which to receive and citrate the blood, a small graduate in which to measure the citrate solution, a glass stirring rod, an infusion bottle or graduate connected with about five feet of gum tubing fitted with an adapter, and two ampules of commercial citrate solution. An ordinary blood pressure apparatus is the best means of preparing the arm veins for insertion of the needles.

Half the required amount of citrate is placed in the larger beaker. Here I must urge that sufficient citrate be used. The textbooks say .25%—this is not enough. Use twice as much. Instead of using one of the

ordinary 55 c.c. ampules of 2.5% solution use two for each pint of blood. It is clots that produce chills, not citrate.[1]

The large needle, attached to a syringe for better control, is then inserted into the donor's vein, distended by the sphygmomanometer cuff, pumped up to above the donor's diastolic pressure. As soon as the vein is properly entered the syringe is removed and blood allowed to flow directly into the citrate without the aid of needless rubber tubing. One assistant gently mixes blood and citrate while another keeps the cuff properly inflated. When almost half of the required amount has been withdrawn the remainder of the citrate is added. When the required amount of blood is withdrawn (usually sixteen ounces which with three or four ounces of citrate makes a total of nineteen or twenty ounces) the pressure is released, needle withdrawn and a small dressing placed over the puncture wound. The citrated blood is then transferred to the gravity bottle; the other needle is inserted into the recipient's vein, connection made with the adapter and the rate of flow regulated by the height at which the receptacle is held. Temperature of the blood can be controlled by having a portion of the tube near the needle rest in a basin of warm water.

My excuse for spending so much time discussing this method of transfusion is this: Transfusions may often save life; more often they will hasten convalescence. Yet a false belief in their technical difficulty frequently prevents their being done. This feeling that the procedure is hard to master arises from the complicated devices that are sold for the use of whole blood (and I confess they may be most tricky even in skilled hands). I assure you citrated blood is as valuable if not more so than whole blood; its use is very simple. This paper will have been justified if its use becomes more common.

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THE ADRENAL MEDULLA

Although the adrenal medulla has been studied extensively, both experimentally and clinically J. M. Rogoff, Chicago (Jounal A. M. A., June 8, 1935), states that its function has not been explained satisfactorily. Yet its hormone, epinephrine, is one of the most commonly used drugs in the practice of medicine and surgery. Therefore, he discusses the available physiologic and pharmacologic information in the light of or with special emphasis on its therapeutic application.

Surgical Problems Associated with Cholelithiasis*

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THE surgical treatment of cholelithiasis naturally includes the management of cholecystitis. The etiologic factors in cholecystic disease can only be mentioned here. A vast amount of experimental work has been done on the etiology of gall stones, but this has not greatly altered the conception that there are three main factors, infection, stasis and cholesterol metabolism, which function in their causation.

In discussing this problem, Twiss and Green[1] have contributed a very excellent article on the dietary and medical management of the disease. They made the pertinent statement that a tremendous amount of work has been done on different phases of cholesterol metabolism but so far there is no final agreement as to the origin, function or fate of this material. They feel that if medical therapy is ever to supplant surgery in this field of medicine it will be necessary to recognize and to correct disturbances in the biliary tract before the calculi are formed.

One question which almost always arises in the surgeon's mind concerns the rate of formation of these stones and it is possible that cholecystography may lead to more complete information about this phase of the problem. I was very much interested last year while visiting a clinic of Dr. John Finney, Sr., to hear him cite the case of an elderly woman who had acute suppurative cholecystitis with stones. Her condition was such that he did not feel justified in performing cholecystectomy, but did do a cholecystostomy and removed a large number of stones which had packed the gallbladder. This patient made a good recovery, but one year later returned with recurrent acute cholecystitis, and to his surprise he found that the gallbladder again was completely filled with stones.

Most surgeons are familiar with the external appearance of the typical gall stones and are always interested in the shape, size and color of the stones, but most of us have forgotten the internal appearance of these stones. These colored slides are reproduced from Rolleston's text book, showing the internal appearance of the different types of gall stones. With these in mind it is easy to determine the exact nature of the stones from the radiologic study in many cases.

I have felt for some time that since the advent of cholecystography many of the points which the radiologists formerly taught about gall stones have been overlooked. Often, shadows are seen in the gallbladder area which might be taken for gall stones unless a differential diagnosis is made. The slide first shown is a roentgenogram of 100 consecutive gall stones as compared with 100 kidney stones. It will be noted that approximately 85 per cent of the gall stones show faint shadows while 85 per cent of the kidney stones show dense shadows. It is also more or less generally forgotten that if the patient is turned on the abdomen when the roentgenogram is made, there is a marked difference in the size of the stones. They appear much smaller when the patient is in the posterior-anterior position than when he is in the anterior-posterior position. The rereverse is true of renal calculi. Less emphasis has also been placed upon the typical defect, an elliptical, sharply defined concavity, which the gallbladder can produce in the duodenal cap. It is to be pointed out, however, that unless the defect persists in all positions, it may not be of importance, as the duodenum may empty completely if the picture is taken with the patient on the abdomen. With barium in the stomach it is perfectly easy to demonstrate this defect. It is surprising how often gall stones are noted also by the radiologist in the taking of routine roentgenograms of the spine and the kidneys, ureters and bladder. Although the radiologist objects to making barium injections into a colon without a complete roentgenologic study of the gastro-intestinal tract,

* Presented before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, September 1934.

including a cholecystogram, it is also striking that gall stones are found so frequently in cases in which barium studies on the colon are being made.

There are a few special points on cholecystography which might be mentioned. It has been of particular aid in the diagnosis of cases of cholelithiasis without colic, showing negative shadows. Kirklin,[2] with his enormous experience, has stated that ordinarily gall stones are not recognized as such by cholecystography in more than 50 per cent of the cases, but in most remaining cases the absence of any shadow of dye will indicate that the gallbladder is not functioning normally, and in his experience 98 per cent of cases of gall stones have given positive cholecystographic data, indicative of disease or malfunction of the gallbladder. Another diagnostic method which may be of help in some of these cases in which the cholecystogram and physical findings are not typical is the searching for cholesterin crystals by means of the Lyon test. Lahey[3] has recently emphasized the importance of this procedure.

DIFFERENTIAL DIAGNOSIS

In considering the differential diagnosis of cholecystitis with stones, one is familiar with the fact that the lesion has been confused with practically every intra-abdominal lesion, especially those of the upper abdomen, and in addition, the lesions of the right chest, and necessarily these can not be discussed here. There is one phase of the problem, however, which merits special emphasis. Within recent years cardiologists have been continually cautioning us about the similarity which may occur between the atypical coronary occlusions and gallbladder disease. It is true, of course, that in the case of the patient who has a typical gall stone colic with sudden severe, agonizing pain in the right upper quadrant, which is referred through to the right shoulder blade, and is followed by residual tenderness and jaundice, there is little difficulty in making a positive diagnosis of cholecystitis with stones. Likewise, the diagnosis of coronary occlusion is just as evident in the patient who has a sudden retrosternal pain, accompanied by peripheral vascular shock, distant heart sounds and pain in the left shoulder which is followed by a friction rub over the precordium. It is, however, in the group of patients who have the atypical symptoms of coronary occlusion and gallbladder disease that the confusion arises, and particularly if the patient had epigastric pain as the result of the coronary accident. In some of these cases there may even be splinting of the abdominal wall. These patients may also have symptoms of indigestion similar to those seen in chronic cholecystitis. Cholecystograms and electro-cardiograms, of course, are of great value in this group of patients and it may be necessary to have repeated electrocardiographic studies. Unfortunately, however, there is a group of patients with characteristic findings in which neither the cholecystogram nor the electrocardiogram may be of much help. Then, too, these patients are frequently seen in the home when neither of these laboratory aids is available.

There are certain clinical points that might well be borne in mind during the acute attack. First of all, gallbladder disease is much more frequent in women and coronary occlusion is much more frequent in men more than 50 years of age. In the cases of coronary disease, one of the important clinical points is the marked peripheral vascular shock. The patient becomes very pale and has a weak, thready pulse. Another differentiating point is that the patient with acute attacks of gallbladder colic usually is relieved by one hypodermic injection of morphine, while the patient with coronary occlusion practically always requires from one-half grain (½ gr.) to two-thirds grain (⅔ gr.) of morphine for relief. It is perfectly logical to assume that if a patient who has had a coronary accident is subjected to laparotomy, the added burden of the surgical procedure will cause a postoperative catastrophe. Hence the question has arisen in some cases of so-called sudden deaths after gallbladder operations, as to whether coronary disease may have been the cause of death, especially in cases in which very little evidence of gallbladder disease was found.

OPERATIVE PROCEDURE

In the preoperative preparation of patients, before cholecystectomy, we have learned from bitter experience that many of them should be as carefully prepared for the operation as the patient with hyperthyroidism or the patient with prostatic hypertrophy. They should not only have complete blood studies for bleeding and clotting time but should be given large quantities of fluids along with calcium intravenously, as advised by Walters,[4] and glucose solution and transfusions. In addition to these measures, we are doing more and more liver function tests on these patients. Graham[5] has combined his phenoltetraiodopthalein which is given for the cholecystogram as a test. Here we have used the glucose tolerance test, in addition to the van den Bergh and icterus index test and we feel that these findings add a great deal to the information about the operative risk.

The question has long since been decided that cholecystectomy is, of course, the procedure of choice for cholecystitis with stones. However, that does not mean that the fine operative procedure of cholecystostomy should be completely abandoned, and certainly there are cases, especially in severely ill, elderly patients, and in deeply jaundiced patients in which it is a life-saving measure.

For many years, one of my associates, Dr. W. E. Lower, has done a so-called modified cholecystectomy which is a valuable procedure in selected cases. One is always struck by the very marked edema which occurs in all the layers of the gallbladder in acute cholecystitis with obstruction of the cystic duct, and Dr. Lower, after evacuating the contents of the gallbladder and removing the stones, shells out the mucosa and leaves the serosa intact. Oftentimes, the line of cleavage is very sharply delineated and the procedure can be very quickly accomplished by blunt dissection. These patients have progressed extremely well after operation. It has the advantage that the mucosa is entirely removed and can not regenerate, and, in addition, the liver bed has not been exposed and contamination of the general peritoneal cavity is reduced to a minimum.

The general technical problems in cholecystectomy are well known and recognizable. There are a few points, however, which are always of interest. One of these is the position of the patient on the table. In my own experience, I have found that it is much easier to expose the gallbladder with the patient flat on the table, rather than to have a kidney support or sand bag under the back. Certainly the recti muscles are much more relaxed and on the whole the exposure is easier. The importance of the high incision has been emphasized by many men and is of great help. Whether a gallbladder is removed from above downward or from below upward is, I feel, a matter of the operator's choice. However, I feel quite strongly that too much emphasis has been placed upon the possible pouching of a cystic duct, after it has been ligated, and I have no hesitancy in leaving all of the cystic duct. I feel that there is very little danger of any difficulty in the duct itself, while the danger of injuring the common duct is much greater if it is tied close to the duct. Preferably, the artery should be ligated separately if possible.

After the gallbladder has been removed and the cystic artery and cystic duct have been tied, the important consideration arises as to whether or not the common duct is to be explored. This old question has recently been emphasized by Lahey,[3] who states that he is exploring the common duct in 46 per cent of his cases. This is, of course, a much higher percentage than is generally carried out by most surgeons. In this regard I have been most conservative in exploring the common ducts and fortunately have had little postoperative difficulty. I have, however, followed Moynihan's dictum about carefully palpating the common duct between the index finger and the thumb. In many cases this can be done readily and in the absence of definite indications for opening of the duct, I have used this as a guide. If a patient has (1) a palpable mass, (2) jaundice, (3) a dilatation of the duct or (4) repeated attacks of cholelithiasis with jaundice, the duct should, of course, be opened and carefully explored, and a small catheter, which is directed toward the liver and carefully sutured afterwards, should be inserted.

Without entering into any lengthy discussion on the controversy as to whether or not

the wound should be drained, I think there are two important facts that should be mentioned. First of all, I have known some eminent surgeons who have closed the abdomen without drainage following cholecystectomy, and almost without exception these men have discontinued the practice. While the common statement is made that after cholecystectomy, when drainage is not used, these patients develop a bile peritonitis, emphasis has not been placed on the fact that this is a most difficult postoperative complication to recognize. The patient apparently will be progressing satisfactorily after his operation and then suddenly may become severely ill and by the time the complication is recognized it is too late to save the patient's life. Apparently the severity of the patient's illness is dependent upon the factors of the quantity of bile in the abdominal cavity and the time element.

RELATIONSHIP TO CARCINOMA

In a discussion of cholelithiasis the relationship of stones to carcinoma of the gallbladder should be mentioned. In our own series of cases 79 per cent of the cases of carcinoma of the gallbladder have shown associated gall stones. Graham has pointed out that primary carcinoma of the gallbladder is much more frequent than is generally supposed, and that it constitutes between 5 and 6 per cent of all cases of carcinoma. The history of these patients is that a fairly high proportion of them report attacks of typical gall stone colic, and in the case cited here the patient had a typical attack of gall stone colic a few weeks prior to the operation, at which time the cancer was discovered. The prognosis in these cases of malignant disease of the gallbladder is, of course, extremely poor and in our own experience these patients have only lived for a few months after the operation.

In Graham's very excellent resume of the subject he points out some very pertinent statistics. In the reported series, from 69 per cent (Musser) to 100 per cent (Janowski) gall stones have been found accompanying carcinoma of the gallbladder. From the evidence cited by other writers, it would seem that the carcinoma has developed after the formation of the stones. Graham further states that 8½ per cent of all cases of stones in the gallbladder have been associated with carcinomas, and he points out that it brings up one phase of cancer prevention which must be emphasized, and the surprising statement that one person in twenty-five with gall stones will have a carcinoma of the gallbladder.

This brings up the question as to the significance of the so-called silent gall stones and how these patients should be advised by the surgeon. It is always interesting that patients who have so-called silent gall stones have been subjected to roentgen examination for vague gastro-intestinal symptoms of some kind, and the whole question about the operability of these patients depends entirely upon the degree of discomfort which they are suffering. A certain number of these patients do obtain relief by medical measures after the correction of other gastro-intestinal complaints.

With the enthusiasm about foci of infections the gallbladder has naturally come in for a great deal of consideration. I think it is only fair to state that the results have not been in any way comparable to the results obtained from removing foci of infection in the teeth, tonsils and sinuses, and that, after all, the chief benefit from removing the gallbladder has been for the relief of epigastric pain and associated gastro-intestinal symptoms.

Another question that a surgeon very frequently has to answer is advice concerning the prevention of attacks of gall stone colic. I have seen a good many patients who have had typical gall stone colic and have advised immediate operation, but they, for one reason or another, wanted to delay the operation. This whole subject is covered most admirably by Twiss and Green.[1]

It is well known that many patients have an attack of pain after the ingestion of a large meal, particularly at night. Dr. John Phillips used to advise these patients to take frequent feedings, following a modified Sippy routine. Although theoretically the ingestion of large quantities of milk and cream would be contraindicated, these patients obtained relief. These dietary measures would probably be of little value in patients who have gall stones, inasmuch as it has been shown

that the cholesterol content of the blood is very difficult to reduce by dietary measures. The foods which are rich in cholesterol, of course, are eggs, brain, butter, goose, duck and liver. I have had some patients who insist that they get relief from some of the proprietary bile salts tablets. These may be objected to on the ground that so many of them contain mild laxatives such as phenolphthalein and cascara, and patients object to the cathartic action.

When one analyzes the accepted contributing factors in cholelithiasis including (1) biliary stasis, (2) infection, (3) disturbances in biliary excretion, (4) cholesterol metabolism, (5) obesity, (6) pregnancy, one is struck by the fact that the problem is complex and that the solution must be worked out separately in each individual case.

CONCLUSIONS

The variety and complexity of the etiologic factors, together with the fragmentary knowledge concerning them, makes the medical treatment of cholecystic disease difficult, if not impossible. Hence, at present, the emphasis must be placed on the surgical management of the disease, which can only be improved by more careful attention to the details, such as individualization of each case, extreme skill in the differential diagnosis, which includes accurate interpretation of clinical, laboratory and roentgenologic findings, careful preoperative management and scrupulous care in the surgical technique.

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DISCUSSION

Dr. Gunnar Gundersen (La Crosse): Doctor Dinsmore has brought to our attention a timely subject and one of absorbing interest. I shall try to limit my discussion to problems embraced in this excellent paper. There is very little, if anything, with which to take issue but some points might warrant reemphasis.

The matter of cholesterol metabolism relates to the problem of prophylaxis in cholelithiasis, and it is safe to say in respect to this that the surface has just been scratched. At least, we can look with more hope to the future by further studies along this course than by studies along lines of infection and stasis, fields which have been extensively explored in the past.

The essayist discusses the matter of "rate of formation of stones". In this connection, I should like to relate a few cases of stones in the common duct with which we have been concerned during the past twelve years. They are instances of three women between the ages of thirty-six and eighty-two years, all obese, all from the same small community in southern Minnesota, who all three were first treated surgically for empyema of the gallbladder associated with cholelithiasis, but in none of the cases were stones found in the common duct at the time of the original operations.

The first—fifty-five years old—was relieved entirely for one year and returned in a year and a half for her second operation when a single stone, three-fourths of a cm. in diameter, was removed from the common duct. After this, she had relief for another year, but suffered attacks for six more months before submitting to the third operation when a single stone, 6 cm. was found. The common duct was greatly dilated. This time the common duct was drained. Relief followed the third operation for sixteen months—she continued to have occasional attacks for 4½ years more when she submitted to the fourth operation when two more stones were removed. T Tube drainage was instituted. Since this last and fourth operation, she has been free of attacks for over 2½ years and is well at the present time.

The second patient—obese, thirty-six years old—had four operations in the course of 4½ years. After the first operation, she had relief for five months when three facetted stones were found in the common duct and also a single stone in the remnant of the cystic duct. She had the third operation only two months later when a single stone was removed. It is probably safe to assume that the last stone was not found at the time of the second operation although the possibility of its having developed in the interim is not out of the question. Following the third operation, she had relief for four years when the fourth operation revealed a stone 1 x 2 cm. in the common duct. The common duct was greatly dilated.

The third patient—seventy-one years old when first seen,—required only three operations before she became symptom-free but was complicated by an empyema following her original operation so that a thoracotomy became necessary. Her third and last operation was at the age of seventy-nine and its

success can probably be attributed to spinal anesthesia as at the last operation one large stone was found in the common duct in addition to four small ones in a diverticulum on the posterior side of the common duct. This patient is now symptom-free three and one-half years after the last operation, and, with the exception of suffering from a cardiac condition, is relatively well and enjoying good health as far as the biliary tract is concerned.

These three cases may illustrate the fact that stone formation takes place at a much more rapid rate than was formerly thought to be the case and supports the case referred to by Doctor Dinsmore as cited by Doctor John Finney, Sr.

In regard to the value of cholecystography, it seems to me that we are inclined to lose sight of the value of a plain abdominal roentgenogram in the diagnosis of gallbladder disease. Very often a plain film without the preliminary administration of dye by vein or by mouth will make a positive diagnosis possible—thereby saving the patient further unnecessary investigation. Furthermore, it should be borne in mind that an x-ray negative gallbladder after dye administration does not necessarily preclude gallbladder disease. Stones, polyps, carcinoma, cholesterol deposits and pericholecystitic inflammation may be present even though no x-ray evidence is at hand.

In regard to the matter of coronary diseases associated with cholelithiasis, it is of interest to bear in mind the experience of Judd who found that "54% of the patients with angina pectoris with coincident disease of the gallbladder were improved as far as cardiac disease goes after the diseased gallbladder was removed". Given a reasonably good surgical risk, it would then seem that a patient suffering from both diseases should not necessarily be denied the benefits of gallbladder surgery.

Preoperative preparation of the patient brings up the problem of time for operation. This question is far from settled. Precedent and opinion vary. Men of wide experience hold opposing views. A well known surgeon has stated that cholecystectomy during the acute stage of the disease entails unwarranted danger, but a surgeon of international repute has recommended immediate operation with cholecystectomy as the objective. Love—in the Hunterian Lecture, 1929, until recently allowed the acute inflammation to subside and then performed cholecystectomy after remission of the symptoms. Hotz, 1923, found the mortality twice as high in the acute stage but that in 62.9% of the cases the signs and symptoms failed to subside. Zinninger recommends immediate operation if symptoms do not subside promptly. Graham concluded that early operations gave better results, many deaths could be attributed to delay, longer and more difficult operations were necessary and more postoperative complications and longer hospitalization. Miller operates without delay in presence of increased temperature, tenderness, spasm and severe pain (most important).

Relative to the question of cholecystectomy versus cholecystostomy, little need be said. The immediate risk with cholecystectomy is probably no greater. The exceptions to cholecystectomy may be listed as (1) poor surgical risk; (2) presence of jaundice; (3) small atrophic liver; (4) common duct disease; (5) much infection. Suffice it to say that in a large series of cases studied by Judd, the best results surgically were obtained where the gallbladder was removed and the common duct drained. Worst results were obtained by simple drainage of the gallbladder. Inasmuch as carcinoma of the gallbladder apparently is found only in those cases in which there has been pre-existing gallbladder pathology in the form of stone, polyps, inflammation or adenomas, it would seem that cholecystectomy should be done whenever possible in order to preclude such an eventuality in the future. After all, cancer prevention is much more effective than treatment instituted after the disease has become established.

In a discussion of the technical problems involved in gallbladder surgery, we feel that the greatest advance has come about as a result of the improved relaxation obtained from the use of spinal anesthesia. The severe postoperative reactions, to a certain extent at least, seem to be a thing of the past although better preoperative preparation may possibly account for this to some extent. Certainly it is fair to state that the exposure is facilitated, technical difficulties are overcome, the operation is carried out more expeditiously, the age of the patient upon whom it is safe to operate has been extended so that there no longer seems to be an age limit and lastly, the postoperative shock is reduced to a minimum.

With stones occurring in the common duct in only approximately five to six per cent of the cases, it would not seem justifiable to open the common duct in all cases but reserving this procedure only for those cases in which it is the considered judgment of the operator that it is indicated.

I believe Doctor Dinsmore's attitude regarding the drainage of wounds to be eminently sound. When the wave of enthusiasm to close gallbladder wounds without drain grew some ten or fifteen years ago, we had reason to regret it upon one occasion and since have been very hesitant in closing without drain, reserving it only for the very exceptionally simple case.

CORONARY THROMBOSIS

Warren B. Cooksey, Detroit (Journal A. M. A., June 8, 1935), has observed fifty-three cases of acute coronary thrombosis, with a mortality of 39.6 per cent. Of the thirty-two living patients, 78.1 per cent have been restored to their previous occupation, with one patient living thirteen years after acute infarction and ten patients living six years after the onset of infarction. The electrocardiogram is positive for coronary disease at the present time in 90 per cent of these cases. The mortality of the patients suffering occlusion at the age of 60 and above is distinctly higher than is the case at ages below 60. A much more hopeful prognosis seems justified on the basis of these studies than is generally prevalent. Of great importance is a period of many weeks' convalescence, with appropriate restriction for a full year following acute coronary occlusion.

Gastric and Duodenal Ulcers; Factors Essential to Their Successful Medical Management*

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IF FOR no other reason than that chronic ulcer of the stomach and duodenum, especially the latter, is a highly prevalent disease directly affecting the health and efficiency of many adult members of every community, members of the medical profession naturally should be concerned about it. This paper will be a discussion of those factors which have direct bearing on the outcome of treatment of these lesions.

ETIOLOGY

Definite knowledge concerning the genesis of any disease is of paramount importance in its prevention, cure, or complete eradication. Yet in spite of unprecedented scientific progress in the last half century one is witness to the paradox of knowing little or nothing about the causation and mode of development of many common diseases. Among such diseases ulcer undoubtedly can be included, so that treatment of this lesion is largely on an empiric basis. However, as the result of clinical, pathologic and experimental investigations, valuable evidence pertaining to the pathogenesis of ulcer has been obtained. Present day discussions bearing on etiology are concerned with two factors; namely, (1) heredity and constitution, the endogenous factor, and (2) the influence of trauma, infections, and so forth, the exogenous factor. With respect to the endogenous or constitutional factor, Draper and Touraine, for example, stated that families of an ulcer race seem to produce a preponderance of males, and that these males are of the tall, thin type, possessing qualities of soma and psyche that can be easily recognized. Hurst spoke of the hypersthenic and hyposthenic gastric constitutions, which under unfavorable circumstances predispose respectively to gastric or duodenal ulcer and to carcinoma or addisonian anemia. Riecker stated that there is a familial incidence of peptic ulcer in upwards of 30 per cent of the cases reported in the literature, which strongly supports the viewpoint that constitution plays a part in the etiology of the disease.

Pearl has pointed out that the physician tends to think of particular diseases or pathologic processes as chiefly of exogenous origin or causation, but the biologist regards them as of both exogenous and endogenous origin, both playing important, although not necessarily equal, roles. In support of the theory that underlying ulcer is a constitutional factor, or diathesis, is the familial occurrence of ulcer, and the remarkable tendency for a small group of ulcer-bearing individuals to form one recurrent lesion after another in spite of adequate prophylaxis and safeguards. On the other hand, one is mindful of the invulnerability of the great majority of patients to recurrent jejunal ulceration following gastrojejunostomy in spite of every indiscretion or other provocative factor.

Clinical and experimental evidence impresses the investigator with the preponderant part that exogenous factors play in the etiology of ulcer. This viewpoint, moreover, is supported by Pearl's biologic generalization that such organ systems as the respiratory, cutaneous, genito-urinary, and alimentary tracts, "come normally and regularly into direct and immediate contact with the external environment, while other organ systems do not, but are on the contrary protected from such contact." The nature of these exogenous factors, in my judgment, are chemical and mechanical trauma, focal and systemic infection, gastritis, chronic fatigue, disturbed psychic and nervous states, and heightened vulnerability of tissues to peptic digestion and ulceration from the duodenum downward.

In a previous contribution I summarized my observations on etiology as follows: "One

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cannot escape the conviction that nervous imbalance, resulting in disturbed parasympathetic and sympathetic interaction on gastric or duodenal motility and secretion, plays an important, if not an exclusive part, in the symptoms at least, and in the genesis of ulcer itself. When an actual lesion does develop under such circumstances, it seems justifiable to predicate a mucosal susceptibility based on inheritance, or acquired through the influence of infection or other sustained irritant, resulting in vulnerability of the gastric and duodenal tissue to the heightened corrosive and digestive action of the gastric juice." This conception is in conformity with the current one of attributing to psychoneurogenic disturbances the pathogenesis of ulcer.

Rivers rearranged certain of the important hypotheses concerning the causation of ulcer into a clinical classification which to him seemed applicable to the problem in man. Like several other investigators, he regarded ulcer as probably the result not of a single factor but of several interacting factors. These factors were summarized and elucidated under three heads: (1) the factor of trauma to tissue, (2) the factor of aggression and defense, and (3) systemic factors. Regardless of any viewpoint or opinion with reference to genesis of ulcer, the practical lesson to be derived from the foregoing is this: the patient as well as his lesion must be encompassed in the therapeutic plan, and physical, nervous and emotional strain, focal infection, and unhygienic habits of eating and living must be eliminated, or reduced as far as circumstances will permit.

CORRECT DIAGNOSIS

That successful treatment presupposes correct diagnosis is obvious, yet failure to achieve satisfactory results is often attributable to improper diagnosis. Identification of the majority of both gastric and duodenal ulcers should be fairly easy in view of the characteristic syndrome. It must be remembered that 90 per cent of all ulcerative lesions are in the duodenum, the remainder are in the stomach. In 6 per cent of all cases of duodenal ulcer there is an associated gastric ulcer. The combined effort of the physician and the experienced roentgenologist makes identification and localization of these lesions possible in 90 to 95 per cent of cases.

The anamnesis may be irregular or atypical in a small group of cases in which there are uncomplicated lesions. Such complications as chronic perforation, with perigastric involvement, pyloric obstruction, or gastric retention, hourglass deformity, large size of lesion, multiple lesions, and less frequently carcinomatous transformation or associated lesions extraneous to the stomach and duodenum, may cause irregularity of the clinical picture of ulcer. As is well known, gastroenteric hemorrhage may be the only evidence of the presence of a lesion. In doubtful cases, observation in hospital before and during treatment often clarifies the diagnosis. Failure of prompt and sustained favorable response to more or less adequate treatment for ulcer should raise legitimate doubt as to the presence of an ulcer, at least as to the presence of an uncomplicated or benign one. One occasionally encounters patients whose symptoms are fairly typical of ulcer, including hemorrhage, without evidence of a gastric niche or a bulbar deformity or niche even on repeated examination at the hands of a skillful roentgenologist. Under such circumstances it is important to exclude a diffuse type of chronic duodenal lesion, that is, duodenitis, not always clearly demonstrable on roentgenoscopic examination.

Conditions which most frequently simulate gastric or duodenal ulcer, and which must particularly be excluded in the absence of roentgenologic confirmation of the presence of an ulcer, are functional or nervous gastric disorders, especially those characterized by antral spasm, pylorospasm, and hyperchlorhydria; the types of dyspepsia that arise from the abuse of tobacco; antral gastritis; alimentary allergy; cholecystic disease; esophageal ulcer; pulmonary tuberculosis, and less frequently bleeding ulcers in a Meckel's diverticulum.

PROPER CHOICE OF PATIENTS

As a rule, all patients who have uncomplicated duodenal or gastric ulcers, especially if the symptoms are of short duration, and all younger individuals, should first have the benefit of adequate medical treatment. The

same is true, in large measure, of the more chronic, uncomplicated lesions of older patients, especially if the manifestations are mild and infrequent, not progressive in severity, and do not interfere with the efficiency of the individual. Likewise, medical treatment usually is indicated for such lesions in the aged and in those who have serious, advanced organic disease, such as active, open pulmonary tuberculosis, angina pectoris, diabetes mellitus, advanced chronic nephritis, marked obesity, and decompensated cardiac lesions; moreover, treatment in the presence of pregnancy should be medical. Operation would be hazardous in such circumstances. The highly neurotic individual, whose complaints often are more than the result of his psychoneurotic state than his ulcer, although usually difficult to treat medically, and who infrequently obtains satisfactory results, as a rule should not be operated on. Hyperirritable patients whose stomachs empty rapidly often are not good subjects for operation, even though the only alternative is that of continued medical care and dieting. Many individuals who have late postoperative recurrence, not of formidable nature, are usually relieved successfully by non-surgical measures. Then there are those who choose their own therapeutic procedure; that is, they refuse operation even though it may be definitely indicated, and there is no alternative but to carry out medical treatment. The effectiveness of surgery for gastric or duodenal ulcer is often dependent on proper selection of the patient to a large extent, so that irrespective of whether the treatment is medical or surgical, the therapeutic procedure may fail to accomplish its purpose and may be unjustly looked on with disfavor. Failures in such instances are not so much attributable to any inherent shortcoming in the method, as to injudicious choice of the patient for that particular form of treatment. The close cooperation between internist and surgeon, manifestly more frequent now than it has been in the past, makes for more critical selection of patients for any particular form of treatment, as a consequence of which the results are uniformly better.

METHOD OF MEDICAL TREATMENT

Nowadays the physician is perplexed as to what method of treatment to follow. Shall he continue along orthodox lines as he has in the past, or shall he use mucin to the exclusion of other forms of treatment, or shall he yield to the importunities of a few of the salesmen who represent some of the firms which manufacture products chiefly for parenteral use?

Parenteral methods of treatment are much in use at present. Substances used for intravenous or subcutaneous injection may consist of proteins of specific and nonspecific bacterial origin, proteins of vegetable origin (novoprotein) and proteins of animal origin (aolan, purified milk protein), lipoproteins combined with emetine (synodal), weak solutions of pepsin, insulin, or a combination of insulin and pepsin, sterile solutions of sodium citrate and sodium chloride buffered to a certain pH, and weak solutions of histidine hydrochloride (larostidin—Roche). The efficacy of these various methods still awaits final appraisal. Protein therapy has been disqualified and discontinued in many quarters. Some of the newer substances have been introduced, or used on a large scale too recently to be appraised as to their ultimate curative virtues. Moreover, few controlled studies or experiments are reported, because the conventional methods of treatment, especially approved dietetic measures, have been employed at the same time.

The conservative physician, however, cannot help but feel somewhat prejudiced against these innovations, owing to the extravagant claims made for them. Symptomatic relief is usually afforded by their use, so far as I have observed. At a time when protein therapy was at the height of its popularity in central Europe, I saw several patients on Professor His' service, whom an internationally known exponent of this form of treatment had just previously reported as being cured by use of a protein preparation. At operation a few days later, Professor Bier found no evidence of healing in the resected specimens. In my judgment, few, if any, of the other preparations will prove any more effective. Recently, Bulmer reported encouraging results with the use of histidine hydro-

chloride. But like other reports of a similar nature, the patients have not been followed long enough to determine how soon, and to what extent, those regarded as cured will have undergone relapse.

Treatment of ulcer with gastric mucin, a method developed by Fogelson in 1931, has aroused general interest. Observations based on several hundred ulcer-bearing patients treated with gastric mucin alone, or with gastric mucin in combination with the milk-cream-alkali regimen, have convinced me that certain individuals make very favorable response, when customary methods are less effectual. Similar results have been reported by Henning and Norpoth. At the outset, this product contained impurities which had the effect of histamine, and it also had a very disagreeable taste, so that many patients objected to it. Both of these disadvantages have now been overcome. Of some promise is the powdered extract of animal duodenal mucosa and submucosa. A preliminary report concerning the results obtained from its use already has been made by Rivers.

By "orthodox" or "customary" method of treatment is meant the method devised by Sippy, or one of its modifications. Following adoption of this method we, at the clinic, soon became aware of its shortcomings, the most important one being the tendency to provoke alkalosis in about a fifth of the cases. However, we realized that the principles underlying the treatment promised the greatest success, because our clinical, experimental, and surgical experience had taught us that any treatment which effectively controlled or neutralized acidity of the gastric content, excess gastric secretion, and proteolysis, as well as corrected any disturbance of gastric motor function that might be present, promised the greatest success. The meticulous attention directed to the fulfillment of these purposes, so far as was humanly possible, amounted almost to a ritual; the complete rest, the cultivation of the patient's cooperation, the careful management following treatment in bed, the duration of which was dependent on the circumstances in each case, in my judgment, gave greater promise of cure or relief than could be given by any other procedure short of surgical intervention.

The objection will be raised that such treatment is the counsel of perfection and that only a minority of patients will be able to avail themselves of it, for reasons economic and otherwise. In the past I have always been ready to agree with this objection, but in more recent years I have become imbued with the conviction that adequate medical treatment, instituted at the earliest time that circumstances permit, irrespective of the social or economic status of the individual, would reduce morbidity, mortality and economic loss far out of proportion to the personal sacrifice entailed, in the majority of cases. One has to fight fire with fire, and such fire is most easily extinguished when the blaze is small.

Unfortunately, in the earlier stages of the disease, when the symptoms are mild and give rise to little concern, and when conservative therapeutic measures would prove most effective, the patient procrastinates in consulting his physician, and frequently when he does go to a physician, either the lesion goes unrecognized or the treatment instituted is haphazard and incomplete. Thus, the opportunity of the practitioner is lost and the patient eventually is obliged to seek the specialist or surgeon in order to obtain relief.

The necessity for thoroughness in treatment already has been implied. Even as recently as 1932 Moynihan stated that the failure of medical treatment was attributable to its insufficiency and that very few patients received any treatment which offered a reasonable prospect of healing the ulcer. Members of the medical profession are becoming increasingly cognizant of the fact that early diagnosis and prompt, adequate treatment are all important. Once the lesion becomes sufficiently chronic, the patient must be given the same consideration and the same thorough, supervised treatment that is given to the diabetic, tuberculous, or nephritic patient, even though the prognosis in the average case of ulcer under such circumstances is distinctly more favorable than in the diseases cited.

Treatment while the patient is ambulant has its advocates, and much can be achieved

in this way, as has been pointed out by Blackford and Bowers. Complementary to rest and dietetic and medicinal measures, is treatment directed to control of nervous or emotional disturbances and those other exogenous factors previously discussed. Consequently sedatives, antispasmodic drugs, and frequently physiotherapeutic and anticonstipation measures are indicated.

CAUTION IN TREATMENT

It is readily apparent that conservative treatment directed to a carcinomatous ulcer, mistakenly regarded as a benign one, is doomed to failure, and if such treatment is protracted, disaster is inevitable. Unfortunately the physician who more or less specializes in diseases of the digestive tract is as often prone to this error as is the general practitioner, if not more so. At a previous meeting of this society, Dr. Kirklin and I described the combined clinical and roentgenologic features of benign, and small malignant, gastric ulcers. The frequency with which malignant ulcers of the stomach masquerade as benign ulcers was pointed out. Clinical, roentgenologic, and pathologic records, as well as information obtained from follow-up studies, reveal the following interesting facts: (1) 23 per cent of carcinomatous gastric ulcers are within the range of size of benign ulcers; (2) in 30 per cent of all cases of carcinomatous ulcer, it was not possible to determine, from a roentgenologic standpoint, the exact nature of the growth; (3) 9 per cent of all carcinomatous ulcers were considered benign from the roentgenologic viewpoint; (4) 8 per cent of carcinomatous ulcers occurred in patients who were less than forty years of age.

Subjective features which enhance the possibility of malignancy of the lesion are (1) late onset of symptoms in an elderly patient, (2) initial or subsequent irregularity of the syndrome of ulcer.

Objective features highly suggestive of malignancy are (1) large size of lesion or irregular outline of niche, (2) situation of the lesion in the prepyloric portion, posterior wall, or greater curvature of the stomach, (3) persistence of blood in the gastric content and feces, especially following treatment, (4) achlorhydria associated with pyloric obstruction, (5) low concentration of free hydrochloric acid, and low secretory volume, and (6) incomplete results from adequate treatment.

The practical lesson to be drawn from all this is that any patient who has a gastric lesion, and who is undergoing medical treatment, should be treated adequately, should be carefully watched until anatomic restoration is complete and sustained, and until all other symptoms and signs have permanently disappeared. Any doubt about the nature of the lesion, or failure of satisfactory progress under treatment, justifies surgical consideration.

CONCLUSIONS

The major factors underlying successful medical treatment are: (1) proper consideration of all causative and contributory factors if a patient has a gastric or duodenal ulcer, so that the patient, as well as his lesion, is encompassed in the plan of treatment; (2) proper diagnosis before treatment is undertaken, proper selection of the patient for treatment, and institution of adequate treatment as early as possible; (3) full cooperation of the patient so that treatment, while he is ambulant, will prove effective; (4) looking on chronic ulcers of the stomach or duodenum in the same light as any other chronic disease; (5) adherence to customary or conventional methods of treatment, which should be flexible and individualized, until newer methods have convincingly proved their worth (refractory cases may be treated by combined neutralization therapy and mucin, or as substitutes for mucin, duodenal extract, or probably histidine; the earlier and the more intensive the treatment by conventional methods, the less the necessity for attempting or advocating newer methods); (6) whenever possible the carrying out of the initial treatment in a hospital in preference to treatment with the patient ambulant; (7) in the conservative treatment of gastric ulcer, establishment of the benign nature of the lesion (lesions that are resistant to treatment, even though apparently benign, should be submitted to operation without unneces-

(Continued on page 508)

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OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN

« « « EDITORIALS » » »

Three National Officers

WHEN the Atlantic City session of the American Medical Association and its Auxiliary was brought to a conclusion, Wisconsin had been honored with the election of three national officers.

Dr. Rock Sleyster is now Chairman of the Board of Trustees of the American Medical Association.

Mrs. Robert E. Fitzgerald of Wauwatosa is now President-elect of the Woman's Auxiliary to the American Medical Association,

Mrs. Eben J. Carey is again Treasurer of the Woman's Auxiliary to the American Medical Association.

Wisconsin may well be proud of the honors that have been bestowed upon these three members,—honors that have come because these individuals have demonstrated so well their high capacities for signal service.

High Accomplishment

DURING the late spring the Milwaukee Journal announced that radio station WTMJ had cancelled all contracts carrying the radio advertising of internal patent medicines. The Station announced that such advertising "was not deemed to be in the public interest" and that from now on "products which claim to be universal cures and others which cannot support the claims made for them will be barred from the air by WTMJ. Network programs presenting offensive advertising will also be cancelled for the same reasons if conditions warrant."

The Milwaukee Journal is to be congratulated for the position it has taken.

Back of the scenes, however, was the Woman's Auxiliary to the Medical Society of Milwaukee County. Over a substantial period of time the Auxiliary furnished the management with reports of the Bureau of Investigation of the American Medical Association concerning products then being advertised over the radio and in the daily press. The position of the radio station doubtless was taken as the result of cumulative evidence of the deleterious public health aspects of this type of advertising so well presented through the Auxiliary's interest.

We congratulate the Woman's Auxiliary to the Medical Society of Milwaukee County on accomplishing a high objective in the interest of the public. This is just one more bit of evidence that the Auxiliary can and does render fine service. We look forward to the day when every County Society in Wisconsin will have its Auxiliary.

SPECIAL EDITORIAL

DR. WILLIAM SHAINLINE MIDDLETON,
Dean, Medical School, University of Wisconsin

A NATIVE of Pennsylvania, born at Norristown, Montgomery County, Pennsylvania, 1890, he received his degree of doctor of medicine from the Medical School of the University of Pennsylvania in 1911. After serving residencies in the Philadelphia General Hospital and Babies Hospital in Philadelphia, he came to the University of Wisconsin as instructor in clinical medicine in the fall of 1912. His development as a nationally-known teacher and clinician has occurred in the State of his adoption. His service to the University of Wisconsin has been continuous except for the period of two years spent overseas with the Medical Corps of the American Expeditionary Forces.

Dr. Middleton, therefore, was intimately associated with each stage of development of the clinical courses in the Medical School. The character of his work during those early years had a most important influence upon the formation of plans of organization and of clinical teaching. He was advanced to assistant professor in clinical medicine in 1915, and was placed in charge of the Student Infirmary upon his return from overseas service in 1919. From this time up to the opening of the clinical courses in 1925 he was laying the foundations for the methods of clinical teaching and ward organization later established, and at present more completely developed by his efforts in the Wisconsin General Hospital. In 1925 he was advanced to associate professor in medicine and in 1933 to professor in medicine. During his twenty-three years of service to the University he has been an indefatigable worker. He has been, in a large measure, responsible for the orderly coordination of the clinical teaching in its relations to the medical sciences. As a teacher, his accuracy has inspired the students to greater endeavor. He has insisted upon a logical and humane application of the medical sciences to human welfare. In his clinical research he has always shown critical judgment, which has given to his accurate observations helpful practical significance. His enthusiasm has not only stimulated his students, but his colleagues as well, to more careful clinical investigation. Because of his mental capacity, his physical energy, his ability to organize, his interest in the work of others, his proper sense of values, and his great human sympathy, his selection as Dean of the Medical School is most fortunate.

Dr. William S. Middleton

Medical History in Wisconsin

AS THE pageant of Wisconsin's past is unfurled, the Sioux, Chippewa, Kickapoo, Menominee, Potawatomie, Winnebago, Sauk and Foxes file in solemn ranks before the mind's eye. Then come the French voyageurs and priests. Officially the English succeed the French but their representatives are simply military occupants of the post at La Baye (Green Bay). And now in growing numbers return the French, and Americans are added, eager to share the furs and trade of the Indians. Finally a young nation replaces the parent and the territory passes into statehood.

The nation at large is still apt to think of Wisconsin as a new country and the wide stretches of cut-over land and of second growth timber in our northern counties strengthen this impression. Children of pioneers still hold a prominent place in our public affairs. Group immigrations have had a peculiar part in our settlement and development. Whole communities take their origin from Scandinavian or Central European stock. These recent movements of population have too often led us to overlook the early settlements of the white race in Wisconsin. Accordingly such celebrations as the tercentenary of Green Bay are particularly designed to stimulate interest in our fine historical traditions. As a constant reminder of the fortitude and tenacity of the early French explorers and settlers we have properly preserved their mark upon our lakes, rivers and towns.

Medically speaking our history dates back almost to the discovery of the circulation of the blood by William Harvey. Beyond a question of doubt the original Indian tribes inhabiting what is now Wisconsin had their forms of medical practice. The French voyageurs and trappers brought their medical traditions and practices. Or if this sturdy lot neglected such details, certainly the Jesuit fathers who accompanied or succeeded them, were more resourceful in this direction. It may be assumed that the missions on Chequamegon Bay and at Rapides des Peres (De Pere) ministered to the body as well as to the soul. A surgeon's mate, if not a medical officer, must have accompanied the detachment of the 60th (Royal American Foot) Regiment that occupied La Baye for the British in 1760. The growing settlements elsewhere west of Lake Michigan may well have had their medical practitioners, regular or irregular.

Down to more recent years and the more permanent settlement of Wisconsin, we find medical men becoming a greater force in civil and military life. To the latter phase we owe one of the finest traditions in scientific medicine in the observations of William Beaumont upon the physiology of digestion at Fort Crawford near Prairie du Chien. Under the aegis of Dr. William Snow Miller our State Medical Society has commemorated this epochal study by a properly inscribed marker. But there were unquestionably other forceful personalities in the military services at this and other military posts in Wisconsin. The Black Hawk War passed through our boundaries and doubtless the territory made its medical contributions to its successful conclusion. The old Fort Crawford where Beaumont worked has long since disappeared. A few stones marked the site of the later hospital building at new Fort Crawford until its restoration. The old hospital building at Fort Howard (Green Bay) is preserved as a museum. One of our county medical societies labored valiantly to keep and to restore the hospital at Fort Winnebago (Portage) for posterity. This worthy purpose may yet be consummated. Unfortunately many of our priceless relics of this order are gone beyond recall; but there is a pressing need for an organized effort to save what remains of the past and to place in operation a mechanism that shall preserve future items of medical historical value.

It is too much to expect that the full secrets of Indian medicine shall ever be revealed to us. Yet undoubtedly much valuable information would be forthcoming to the proper student of this difficult subject. A much more fruitful prospect opens in the medicine of the French settlements. The Jesuit scholar should have available sources and invaluable materials from a medical historical standpoint and it is our duty to enlist

YOUR ASSISTANCE

This editorial asks for cooperative effort. Your interest and assistance are solicited.

his interest and cooperation. Probably the English military occupancy at La Baye would afford little of medical importance; but, as has been indicated, the studies of the American military posts are far from exhausted.

Organized medicine has had a long and illustrious history in Wisconsin. Few of us stop to realize that our State Medical Society antedates the statehood of Wisconsin. The essential proceedings, activities and the participants in early meetings of this and other medical organizations in the State must be fixed now if they are to be preserved. Medicine is so individualistic an endeavor that personalities enter deeply into its practice and growth. We should count it a personal duty to record such details as will make these physicians live to future generations, as the kindliness of a John W. Coon, the wisdom of an Edward Evans, the profundity of a Karl Doege, the cheer of a Charles Sheldon or the joy of a Jerry Wooll. Time is fleeting and such vignettes as we draw may serve as the only preserved human estimate of our associates. Fuller justice may be done in more expansive works. The medical activities of our members in the several wars of our country is a further subject requiring the attention of our members. Men of Wisconsin have enriched the field of medicine elsewhere and it is proposed to collect biographic sketches of Senn, Murphy, Billings, Favill and a host of others.

Medical education had much earlier beginnings in Wisconsin than we are wont to think. Doctor William Snow Miller has written a very interesting account of the La Crosse Medical School. Other institutions in the state have almost passed from the memory of man. The histories of the several medical schools in Milwaukee that eventually came to form Marquette University Medical School and of the University of Wisconsin Medical School have never received adequate attention. The time for this service is ripe. The existing hospitals of the state, public and private, have points of individual interest, but not uncommonly of general importance. Certain other hospitals and sanatoria have been abandoned or their functions discontinued. A note of their background, functions, and course would be interesting.

A committee on medical history has been appointed and has formulated its plan of attack. It is the concensus that a published volume on the history of medicine in Wisconsin shall not be contemplated until years of accumulated materials and study shall afford a fair basis for such a project. Meanwhile it is hoped from time to time to publish short historical articles upon individuals, institutions, medical practices and the like in the Wisconsin Medical Journal. Clearly this must be a cooperative effort and there is ample outlet for all interested individuals. Your interest and assistance are solicited.

One of the most important functions of the said committee is obviously the collection of pertinent papers, books, and instruments. The State Historical Society has agreed to act as custodian of such materials for the State Medical Society. By such a plan the committee may, through the members of the State Medical Society, hope to accumulate from interested physicians and their estates historical materials of inestimable value; and eventually not only will the physical store be remarkable but the fund of source references for the ultimate history of medicine in Wisconsin will be priceless.

The Annual Meeting

ON PAGE 492 of this issue appear the preliminary plans for the 94th anniversary meeting of the State Medical Society of Wisconsin. Meeting in Milwaukee on September 17–20, these sessions will richly repay the attendance of every member.

A final and complete program with all details of the meeting will appear in the August and September issues of the Journal. Watch for these, but plan now to attend the Milwaukee meeting.

Society Proceedings

BARRON-WASHBURN-SAWYER-BURNETT

A meeting of this Society was held at Land o' Lakes Hotel, Rice Lake, Tuesday, June 4th at six-thirty P. M.

The following program was presented:

"Urological Pathology in General Practice" (With lantern slides) by Dr. W. E. Bannen, La Crosse.

"Heart Failure and Treatment" by Dr. James A. Evans, La Crosse.

GREEN

The annual meeting of the Green County Medical Society was held on May 23rd at the Eugene Hotel, Monroe.

Dr. L. A. Moore, Monroe, was re-elected president of the Society; Dr. J. F. Mauermann, Monroe, re-elected secretary, and Dr. E. J. Mitchell, Brodhead, was elected vice president.

The program included the following papers:

"Treatment of Hay Fever" by Dr. J. A. Hurlbut, Madison.

"Various Aspects of Heart Disease" by Dr. H. E. Marsh, Madison.

"Diagnosis and Treatment of Pelvic Lesions" by Dr. R. H. Jackson, Madison.

GREEN LAKE–WAUSHARA–ADAMS

Members of the Green Lake–Waushara–Adams County Medical Society and their wives met at Ripon on May 24th for a dinner meeting. Dr. Otto H. Foerster of Milwaukee was the guest speaker of the meeting.

MARINETTE-FLORENCE

The regular meeting of this Society was held at Hotel Marinette on May 16th.

Following dinner a paper was read by Dr. Fred Havens of the Mayo Clinic on "Malignant Tumors of the Head and Neck." This was illustrated by lantern slides.

A discussion of new projects under the Public Works Program followed in which it was brought out that a tuberculosis sanatorium was needed for Marinette County. The Society then adopted a resolution petitioning the Marinette County Board to investigate the possibilities of obtaining government aid for the construction of a community hospital, and if possible to construct such a hospital as the needs of the citizens of Marinette County require.

The President, Dr. J. V. May, appointed the following committee to investigate possibilities for construction of a new hospital under the Federal Relief Act. They are: Dr. C. H. Boren, chairman; Dr. A. T. Nadeau, Dr. T. J. Redelings, Dr. S. Berglund and Dr. H. L. Jorgenson.

POLK

Dr. W. A. Meilicke of Balsam Lake was host to members of the Polk County Medical Society at Perry Mound on May 16th.

Mr. George B. Larson, former secretary of the Society, was a guest.

SHEBOYGAN

The June meeting of the Sheboygan County Medical Society was held in Sheboygan on June 11th.

Dr. Francis D. Murphy of Milwaukee spoke on "The Complications of Diabetes and Their Treatment".

A short business meeting followed. A.C.R.

TREMPEALEAU–JACKSON–BUFFALO

Members of this Society met at the Galesville Commercial Club, Galesville, May 20th. Thirty-five attended the dinner after which the following paper was presented:

"Diabetes" by Dr. Donald Peterson of Independence. This was discussed by Dr. F. T. Weber of Arcadia.

WAUKESHA

"Agranulocytosis" was the subject of an address by Dr. O. C. Clark of Oconomowoc at a meeting of the Waukesha County Medical Society held in Waukesha on June 5th.

A dinner followed the meeting.

WOOD

Sixty physicians attended the May meeting of the Wood County Medical Society held at St. Joseph's Hospital, Marshfield.

The program opened with a diagnostic clinic at four o'clock in the afternoon under the direction of Dr. R. S. Baldwin. This was followed by discussions of pediatric cases by Drs. J. B. Vedder, A. L. Millard, and J. E. Gonce.

At six-thirty a dinner was held at the Charles Hotel which was followed by the evening program. A paper on "Cerebral Nutrition" was read by Dr. Karl H. Doege, Marshfield. Dr. J. B. Vedder, also of Marshfield, discussed "Eclampsia", and Dr. J. E. Gonce of Madison spoke on "Care of the Premature Infant."

FOURTH COUNCILOR DISTRICT

The tenth annual meeting of the Fourth Councilor District Medical Society was held at Lancaster, Friday, May 24th, in the Grantland Club rooms. The following program was given beginning at two o'clock.

"Present Activities of the State Medical Society," by Dr. Thomas J. O'Leary, Superior, President, State Medical Society.

"Orthopedic Cases of Interest to the General Practitioner," by Dr. R. E. Burns, Madison.

"Bronchoscopy in the Diagnosis and Treatment of Pulmonary Diseases" by Dr. P. P. Vinson, Bronchoscopy Department, Mayo Clinic, Rochester.

"A Consideration of the Nature of Cancer and Methods for its Prevention and Cure" by Dr. W. D. Stovall, Madison.

"Medico-Legal Problems" by Dr. Arthur J. Sullivan, Madison.

Dinner was served in the club dining room by ladies of the Evangelical church and a social time enjoyed. M.B.G.

CENTRAL WISCONSIN SOCIETY OF OPHTHALMOLOGISTS

The Central Wisconsin Society of Ophthalmology and Otolaryngology held its spring meeting at Sheboygan on May 25th and 26th.

Following a golf tournament on Sunday, the 25th, dinner was served at the Foeste Hotel. The evening program was held at the Sheboygan Clinic as follows:

"A New Technique", a mastoid film, shown by Mr. Joseph Duncan of Sheboygan.

"Surgical Care of Eye Injuries", by Dr. S. G. Higgins of Milwaukee.

"The Preglaucomatous Stage" by Dr. Michael Goldenburg of Chicago.

On Monday morning, the 26th, Dr. Goldenburg spoke on "Facts and Fancies in the Glaucoma Problem" illustrated with lantern slides.

"Neurological Examinations in Ophthalmology and Otolaryngology" by Dr. F. Eigenberger of Sheboygan.

In the afternoon from 1:30 until 4:00, Dr. J. L. Bressler of Chicago gave a demonstration at the Sheboygan Clinic on the various steps and instruments used in the orthoptic treatment in strabismus. G. L. M.

MILWAUKEE NEURO-PSYCHIATRIC

At the May meeting of the Milwaukee Neuro-Psychiatric Society held on the 23rd, the following program was presented:

"The Promoter Syndrome: Its Localizing, Clinical, and Prognostic Significance" by A. T. Ross, M. D., Madison.

"Historical Survey of the Psychoneuroses" by Annette C. Washburne, M. D., Madison.

"A New Method of Lumbar Puncture" by I. B. Shulak, M. D., Madison.

"Contrast Substances to Visualize Cerebro-Spinal Pathology" by H. H. Reese, M. D., Madison.

MILWAUKEE PEDIATRIC

The June meeting of the Milwaukee Pediatric Society was held on the 12th at the Nurses' Home of the Milwaukee Children's Hospital. Dr. Charles S. Stern, West Allis, spoke on "Simultaneous Immunization Against Smallpox and Diphtheria" and Dr. Karl E. Kassowitz discussed "Hospitalization of Infants".

THE WOMAN'S AUXILIARY

Mrs. Rock Sleyster, 1220 Dewey Ave., Wauwatosa, *President*
Mrs. F. Gregory Connell, 420 Washington Blvd., Oshkosh, *President-elect*
Mrs. George H. Ewell, 2024 Kendall Ave., Madison, *Secretary*
Mrs. Donne F. Gosin, 631 S. Quincy Ave., Green Bay, *Treasurer*
Mrs. Rogers N. Herbert, Nashville, Tenn., *National President*

Atlantic City Meeting

THE thirteenth annual meeting of the Woman's Auxiliary to the American Medical Association was held at Atlantic City from June 10 to June 14. It was an outstanding gathering not only from the point of view of attendance—1849 women registered—but also because the wives of the members of the Canadian Medical Association enjoyed it with us. The business of that convention will be set forth in the "Proceedings" which will be published a little later, and for that reason we will omit the details of the business carried out, and touch a few highlights.

On Sunday evening before the convention opened the Woman's Auxiliary to the Medical Society of Delaware entertained at dinner in honor of Mrs. Robert W. Tomlinson. The guests were the officers and board of directors of the National Auxiliary. It was a gala occasion and spoke volumes for the high place held by Mrs. Tomlinson in the hearts of Delaware Auxiliary members. Monday evening the New Jersey women were

hostesses at a Get-Together Dinner at the Ritz Carlton, followed by a most delightful musicale. Tuesday the general session opened after the annual Southern Breakfast. There were reports from the chairmen of the standing committees and from the officers, and the special committees were appointed. These reports will appear in full in the "Proceedings". At noon there was a luncheon for auxiliary members and guests at Hackney's, famous for its seafood. A tea with the Woman's Auxiliary to the Philadelphia County Medical Society as the hostess group followed later in the afternoon.

Wednesday more business followed and the report of the nominating committee was read with the election following immediately. Two Wisconsin women appeared on the ticket, Mrs. Eben J. Carey, past president of the state auxiliary, who served so successfully as treasurer of the national organization last year, was re-elected to that office; and Mrs. Robert Fitzgerald of Wauwatosa, was chosen president-elect.

At the Auxiliary luncheon Wednesday noon, Dr. Allen Dafoe of quintuplet fame, was a guest. After a short talk Dr. Dafoe answered a number of interesting and, in some cases, vastly amusing questions asked by the women in his audience. The main speaker of the afternoon was Dr. Leonard George Rowntree of Philadelphia, who spoke on "The Romance of Medicine."

There is so much that might be said of the entertainment planned for the convention guests, the evening at the Steel Pier, the luncheon and style show at the Ritz, the "Bring Your Husband Dinner", and finally the president's reception and ball. Each event was a real pleasure.

On Wednesday when the state reports were read—and we heard 40 of them—we were impressed more and more with the real work being done by our organization. We of Wisconsin were particularly proud of our state report as given by our state president Mrs. Rock Sleyster, and we were not alone in thinking it the best report of the convention. From these reports we learned many things. Illinois, Oregon, and California have been active in legislative work this past year, and through auxiliary effort the interests of the medical profession have been safeguarded.

Georgia has gone forward in its Mother Welfare work and in addition has sponsored Doctor's Day with the result that the following recommendation was adopted by the national body: "That the National Auxiliary recommend to the states that each state observe annually a day of appreciation of the struggles and sacrifices that the medical profession has made in the defense of human living through the ages—such a day to be called 'Doctor's Day' and to be selected by each state in commemoration of some member or notable advance in the Medical Arts in the state."

Iowa has supplied food to 540 mothers on relief, and taught them its health value and proper preparation.

Pennsylvania with 1300 members, has already contributed $16,102.90 to the Physician's Benovolent Fund.

South Carolina has a Student Loan Fund which keeps two students in school.

Texas has accomplished a great deal the past year by urging periodic health examinations.

Michigan stresses Public Relations work. This state was second in the number of subscriptions for HYGEIA obtained during the year.

New Jersey, too, has a most effective Speakers' Bureau.

The District of Columbia does a great deal of charity work in a hospital during the year, and in addition has contributed $300 towards a carpet for medical society rooms.

The two smallest states as far as membership is concerned, are South Dakota with a membership of 46, and Idaho with 50 members. New York state which has just been organized and at present has three active county groups, may easily become our largest state for it boasts 13,000 doctors.

Certain memories of the Atlantic City meeting will always remain: the library high atop the Traymore Hotel open to the Atlantic breezes on three sides, the graciousness of the convention hostesses, the friendly yet efficient manner in which Mrs. Tomlinson conducted the business meetings, the charming

seriousness of our new president, Mrs. Herbert, the crisp curling hair and heaven blue eyes of our Canadian Mrs. Routley and the graciousness of her countrywoman, Mrs. J. C. Meakins, the depth of the understanding of Mrs. Wayne Babcock, and above all the realization that we are all friends bound together by a common purpose.

In closing may I be personal for a moment? I should like to thank all the members of the Woman's Auxiliary to the Wisconsin Medical Society for the beautiful gardenias presented to me on their behalf by those members of the organization who attended the meeting. It is impossible to repay such kindness but it is easy to remember and treasure it for all the days to come.

MRS. ROBERT FITZGERALD.

Mrs. R. E. Fitzgerald Elected National President-elect

ANOTHER honor, national in its scope, has been conferred upon a Wisconsin woman,—**Mrs. Robert E. Fitzgerald of Wauwatosa.** At the annual session of the Woman's Auxiliary to the American Medical Association in Atlantic City, she was chosen president-elect of the organization.

During the past year Mrs. Fitzgerald served as national chairman of press and publicity. Her National News Letters, each one from eight to ten pages, were stimulating and helpful to state auxiliaries. An excerpt from the January News Letter will help acquaint one with Mrs. Fitzgerald.

"If this letter pleases you we are happy, if it bores you or strikes you as inadequate we are in the dust but lift our lowly head enough to whisper that we depend entirely on the news sent in by the state chairmen of press and publicity. . . . The reports need not be formal, a newsy recital of what has been happening in the various states attracts more readers than does a cold chronicle of statistics. This whole thought might be put into a very neat resolution were your national press and publicity chairmen ready with words, but things being as they are and a housewife merely a housewife for all the ink stains on her fingers, each of you may frame your own resolution and we will be content with wishing you all good things for 1935."

It is to be regretted that each News letter could not be passed on to the membership in its entirety.

Those of us who are acquainted with Mrs. Fitzgerald know how intensely interested she is in Auxiliary work. However, she takes active part in other organizations also. She is Director of Providence "Four" of Gamma Phi Beta and formerly was scholarship chairman of the sorority. She is very active in civic work in the city of Milwaukee.

Mrs. Fitzgerald attended Wellesley and the University of Michigan, receiving the degree of Bachelor of Arts from the latter institution in 1917. In 1918 she received her M. A. from Michigan. She is a member of Phi Beta Kappa and Gamma Phi Beta.

In addition to her active interest in other organizations, Mrs. Fitzgerald has served as Parliamentarian of the State Auxiliary since the last state meeting.

Mrs. Eben J. Carey Re-elected National Treasurer

MRS. Eben J. Carey, Milwaukee, past president of the State Auxiliary, who served so successfully as treasurer of the national organization last year, was re-elected to that office at the Atlantic City Meeting. The Wisconsin Auxiliary can be justly proud in having such an able Wisconsin woman for National Treasurer.

For several years, Mrs. Carey has held a chairmanship or office in the State Auxiliary. At the State Meeting in 1932, she was chosen president-elect of the organization and took office as president of the State Auxiliary at the annual meeting in Milwaukee in 1933, which office she held until the last annual meeting at Green Bay. Mrs. Carey took an active part in formulating plans for the National Convention held in Milwaukee in 1933.

In addition to her present duties as National Treasurer, Mrs. Carey is Program chairman of the Woman's Auxiliary to the Medical Society of Milwaukee County; also Organization chairman of the State Auxiliary

Mrs. Carey is the wife of Dr. Eben J. Carey, Dean of Marquette University Medical School.

1934 HIGHLIGHTS OF THE ROCK COUNTY AUXILIARY

Ten meetings were held during the year of 1934 with an average attendance of twenty members. The Program Committee presented the following programs:

A debate by two members on the Tugwell-Copeland bill; followed by discussion.

"Drugs and Nostrums" by Dr. Harold Bradley of the University of Wisconsin.

A lecture by Dr. Walter J. Meek of the University of Wisconsin on the subject of "Vivisection".

A travelogue of the South Sea Islands by Mr. and Mrs. M. O. Monat, the former a Janesville attorney.

A personal visit by the former State President, Mrs. Eben J. Carey, and Mrs. Fitzgerald, National Publicity Chairman, both of Milwaukee.

Two reviews of articles in Hygeia.

Echoes of the Green Bay Convention.

Two social meetings.

The Hygeia Committee placed twenty-five subscriptions of Hygeia in the various grade schools throughout the county; also in the Junior High Schools, two parochial schools, The Beloit College, and the Beloit Municipal Hospital. Copies of Hygeia furnished by members were placed in beauty parlors and public rest rooms.

Through the assiduous efforts of the Philanthropic Committee, the Auxiliary was instrumental in furnishing the following gifts to Pinehurst Sanatorium: a floor lamp; an electric corn popper; two sewing machines; and seeds, bulbs, and shrubs. With the cooperation of the Federated Woman's Clubs and various church organizations, we were able to procure entertainment for Pinehurst which included concerts and playlets, the cost of transportation being borne by the Auxiliary.

The Beloit Municipal Hospital was the recipient of gifts of an obstetrical dressing cart, a hot water sterilizer, a piano for the nurses' recreation room, a Christmas tree and trimmings for the children's ward, and one hundred and fifty glasses of jelly for the sick.

Through the medium of civic and federated clubs and personal efforts on the part of the members of the Public Relations Committee, we placed speakers in approximately forty different lay organizations. Although we have no speakers' bureau, several members of the County Medical Society graciously accepted the task of speaking at different times, one member alone speaking as many as twenty-five times.

In spite of a limited membership, the efforts of each committee of the Woman's Auxiliary to the Rock County Medical Society have helped to accomplish various worthwhile projects.

MRS. F. E. BRINCKERHOFF,
Beloit, *Secretary.*
MRS. THOS. F. SHINNICK,
Beloit, *President.*

NEWS ITEMS AND PERSONALS

A testimonial dinner in honor of Dr. Gustave A. Hipke of Milwaukee was given at the Hotel Schroeder on May 23rd. Seventy-five physicians were present to celebrate the occasion of Dr. Hipke's forty-five years of service as a physician. Following graduation from Lawrence College he taught school for a number of years before studying medicine. He practiced at Allenton, Kewaskum and Casco before coming to Milwaukee in 1899.

Dr. Hipke was presented with a radio and a testimonial book.

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Remodeling operations were commenced the latter part of May at St. Joseph's Hospital, Marshfield, on the portion which was the original structure, built in 1891. It now connects the east and west wings of the hospital. The cost of remodeling, building, and the purchase of new equipment will be in the neighborhood of $100,000.

Mrs. Emma Crockett, 87, mother of Dr. W. W. Crockett of Beloit died on May 21st at the home of her daughter at Oak Park, Ill.

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Dr. L. B. McBain, Madison, has opened an office at Hartford, Wisconsin. Following internship, Dr. McBain served eighteen months as reserve officer in a CCC camp in Texas.

—△—

Dr. Herbert Virgin, who has been with the Jackson Clinic for the past two years, has opened an office at 122 W. Wash. Ave., Madison. He will do surgical work, specializing in bone and joint and accident surgery.

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Following the notice of the prenatal letter service of the Bureau of Child Welfare, State Board of Health, in the February, 1935, issue of the Wisconsin Medical Journal, the Board reports that during the

month of February, 47 additional physicians wrote in asking that the service be extended to their patients. During the month of March, 34 additional physicians made requests also for such service. Two physicians topped the list by sending in the names and addresses of nineteen patients each for the series of prenatal letters. The letters commending this service by the physicians making use of it have been greatly appreciated by the State Board of Health.

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Dr. M. Fernan-Nunez, Milwaukee, was elected an Academician of the National Academy of Medicine of Spain, on the occasion of the Academy's recent celebration of its fourth centennial.

—△—

Dr. Irwin Krohn of Black River Falls took a postgraduate course in surgery at Cook County Graduate School of Medicine, Chicago, the latter part of May.

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Dr. and Mrs. F. E. Sutherland, Beloit, sailed on May 14th for Europe with the Interstate Postgraduate Medical Assembly of North America. Fifty physicians with their wives were in one group. They will attend clinics at London, Edinburgh, Oslo, Stockholm, Copenhagen, Moscow, Warsau, Berlin, Vienna and Paris. They will return about August first.

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More than two thousand professional public health workers from every state in the Union, from Canada and from Mexico will assemble in Milwaukee the week of October 7th at which time the following organizations will be in convention:

American Association of School Physicians.
International Association of Dairy and Milk Inspectors.
Conference of State Sanitary Engineers.
International Society of Medical Officers of Health.
Association of Dairy, Food and Drug Officials.
Conference of Wisconsin Health Officers.

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Dr. A. J. Hockett, who has been chief resident physician at Wisconsin General Hospital since 1931, has accepted the position of superintendent of Touro Infirmary, New Orleans, La. Dr. Roger DeBusk, who served his internship at Wisconsin General Hospital and has been in private practice at Enterprise, Oregon, is succeeding Dr. Hockett at Wisconsin General Hospital.

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Francis E. Schlueter, son of Dr. and Mrs. U. A. Schlueter is a Magna Cum Laude graduate of Notre Dame University, Class of 1935.

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Dr. Jerome T. Jerome from the staff of the Herman Kiefer Hospital at Detroit, Michigan, has become affiliated with the Jackson Clinic, Madison, in the Orthopedic and Thoracic Surgical Sections.

RADIO PROGRAM

Health talks are broadcast over the Wisconsin State-Owned Station by the State Medical Society of Wisconsin each Tuesday, Wednesday and Thursday at 9:30 A. M. These programs on health are presented at Radio Hall, the broadcasting studio located on the campus of the University of Wisconsin. Tune in near the middle of the dial! Many WHA programs, including health talks, are broadcast simultaneously by WLBL, Stevens Point, —this station, too, is state-owned.

The schedule follows:

July 16—Cancer is Curable
July 17—First Aid to Medical Terms
July 18—Well Known Sayings That Aren't So
July 23—Health and Happiness
July 24—The Case of Joseph Meister
July 25—Before Baby is Two
July 30—Money Loss from Cancer
July 31—Conquering Tuberculosis
Aug. 1—Preparing the Child for School
Aug. 6—Curiosity That Kills!
Aug. 7—"Stomach Pills"
Aug. 8—What is Health?

Dr. Jerome is a graduate of the University of Michigan, where he later became resident surgeon. He served three years as assistant resident and chief resident on the general surgical and orthopedic staffs of the Billings Memorial Hospital at the University of Chicago, under Dr. Dallas B. Phemister and Dr. Edward L. Compere. He was then appointed to the Orthopedic and Thoracic Surgical Sections on the staff of the municipal Herman Kiefer Hospital at Detroit.

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The Mississippi Valley Conference on Tuberculosis will be held on September 12, 13 and 14 at the Hotel Loraine, Madison. This is the first conference to be held in Wisconsin since 1922.

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Dr. M. G. Peterman, Milwaukee, announces the removal of his office on August first, 1935, to the Colby-Abbot Building, Suite 202-203, 759 N. Milwaukee Street.

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Dr. A. G. Koehler of Oshkosh, a member of the State Board of Medical Examiners, was elected President of the Wisconsin Homeopathic Society at the annual meeting of the Society held at the Hotel Retlaw, Fond du Lac. Dr. F. E. Kosanke, Lomira, was re-elected secretary-treasurer and Dr. A. L. Burdick of Janesville was chosen vice-president.

Madison was selected as the place of the 1936 meeting.

Charles R. Bardeen, M. D., 1871—1935

ON JUNE 12th there died at his home in Madison, Dr. Charles R. Bardeen, Dean of the University of Wisconsin Medical School. Death was due to a pancreatic lesion which was followed by liver involvements. His passing closed a life rich in accomplishment and brought a profound sense of loss to his colleagues, associates and the thousands of students in all parts of the world who had come under his influence.

Although Doctor Bardeen was born in Kalamazoo, Michigan, his boyhood home was in Syracuse, New York. The father was an educator and planned his children's education with care. Before entering college the son was sent to the Teichmann school in Leipzig, Germany, where he remained for a year. He always credited this experience with having laid the foundations for clear reasoning and a certain method of direct approach to fundamentals which later characterized all his research, teaching and public activities.

In 1889 he entered Harvard University, graduating in 1893. He was immediately attracted to the opportunities offered by a new medical school, that of the Johns Hopkins University. He entered the first class of this newly established institution and received his M.D. in 1897. Since his name headed the class roll alphabetically he was actually the first person ever to receive a Hopkins' medical degree. Among his class mates were three others who have made national reputations: E. L. Opie, W. G. MacCallum and Richard P. Strong.

Following his graduation, Dr. Bardeen was appointed assistant in anatomy at Johns Hopkins, later becoming associate and then associate professor. In 1904 he was called to Wisconsin by President Van Hise to be professor of anatomy and to lay the plans for a medical school. The founders of medical education at the University were president-emeritus Birge and Doctor William S. Miller, who in the department of zoology had already instituted certain pre-clinical courses. Doctor Bardeen was the founder of the medical school. In 1907 the Legislature authorized the establishment of a two-year school and the professor of anatomy became Dean Bardeen. Around himself he collected a strong faculty. All the students were forced to do their clinical years at other institutions but this quickly established the fact that unusually well prepared young people were coming from Wisconsin. With the building of the Wisconsin General Hospital the full four-year medical course was established in 1925. Following this Doctor Bardeen secured the erection of the Service Memorial Institutes, the Student Infirmary and the Orthopedic Hospital.

In 1932, in honor of his twenty-fifth year of service as Dean of the Medical School, the University of Wisconsin bestowed on his the LL.D. degree. At a banquet attended by many representatives of neighboring institutions, colleagues and students his portrait by Grenhagen was unveiled.

Doctor Bardeen was a scientist, an educator and an administrator. To these three fields of activity he brought enthusiasm and rare judgment. He thought continually of the problems confronting the physician, the student and the patient. He never spared himself and he was as free of ostentation as is humanly possible. The many honors that came to him were thus tributes to his real ability.

Doctor Bardeen's publications make up a list of ninety-six titles. The papers fall into two groups; those which are strictly scientific reports and those which deal with medical education. Among the former group are several that have far-reaching significance. His earliest work had to do with the changes following superficial burns and his observations are still quoted by all students of the subject. Many titles have to do with developmental and experimental morphology. He early made use of the x-ray and was one of the first in this country to study the effect of this form of energy on living

cells. His scholarly work on the "Height-Weight Index of Build in Relation to Linear and Volumetric Proportions and Surface-Area of the Body" was published by the Carnegie Institution. This, as well as his study on the relation of heart size to body, might have opened up many physiological and clinical problems. He first proposed determining the size of the heart from its x-ray silhouette, a method now in universal clinical use. In Morris' Human Anatomy he was asked to write the section on "Musculature", a tribute to his anatomical knowledge. All his scientific work has been accurate, authoritative and of permanent value.

As an educator Doctor Bardeen was not only a class-room teacher of power but he closely studied educational problems from a social point of view. The student, the physician and the public always formed a trilogy of which he was keenly conscious. Each must be kept in balance and its right preserved. The right of the student was to be well taught; the right of the physician was to be independent and to have scientific medical help at hand; the right of the public was always to have the best possible medical care. Some such philosophy was at the bottom of all his writings and educational policies. His idea of a "preceptorship" for senior students depended on such principles. The student was not only profiting from an extensive clinical experience but he was also serving as a stimulus to his preceptor. The Medical School was thus extending its teaching sphere to all parts of the State. The patient must ultimately benefit in this general uplift.

Doctor Bardeen's contributions to medical pedagogy have been notable. He introduced the use of the x-ray in teaching anatomy. His report made to the American Medical Association on the teaching of his science had a wide following all over the United States and Canada. His papers on the buildings and equipment of medical schools brought together much useful material.

Doctor Bardeen was a member and often an officer of many national scientific societies, among which were the American Medical Association, the American Association for the Advancement of Science, Society for Experimental Medicine and Biology, Society of American Zoologists, Society of Naturalists, Society of American Anatomists, Radiological Society of North America, and the Wisconsin Academy of Science. In 1916 he served as president of the Association of American Medical Colleges. In 1920 he was honored by election to the presidency of the State Medical Society. In 1929 he participated in the White House Conference on Child Health and Protection and wrote the section on "Human Types." He also served for several years in the National Research Council.

Even with advancing years and constantly increasing administrative duties Doctor Bardeen never let his interest flag in medical problems. He was recently called upon to administer the Bowman Cancer Fund, and in preparation for this he visited the principal eastern research centers. Those who accompanied him never ceased to marvel at the many friends he found, the quiet direct manner with which he secured valuable information and the understanding he developed of the many aspects of the cancer problem.

With all his duties, Dr. Bardeen found time for local social undertakings. He served as president of the Madison General Hospital Association and under his leadership the west wing of that institution was built. He was one of those largely responsible for the establishment of the University Club and he was for a time its president.

Doctor Bardeen was twice happily married. Three sons and a daughter survive the first marriage and his widow and a daughter the second. Although not interested in the usual routine of society, Doctor Bardeen was never happier than when entertaining a group of friends in his home. His conversational powers and his broad interests made him the most agreeable of hosts.

Dr. Bardeen's scientific studies, his plans for medical education and his development of a well-rounded successful medical school are his permanent contributions to the University and the State. In the words of Dean Scammon of Minnesota, "We shall not see his like again." *W. J. M.*

Dr. Joseph Godfrey, Lancaster, died on May 22nd of heart disease.

He was born in Ireland, March 29, 1856, and at the age of two came with his parents to Quebec, Canada, living there until he was sixteen. In 1880 he graduated from Rush Medical College, serving internship at Cook County Hospital. He then began his practice at Benton, Wisconsin, with his brother, Dr. Henry Godfrey. In 1892 he moved to Lancaster.

Dr. Godfrey was a member of the Grant County Medical Society, the State Medical Society, and the American Medical Association.

Survivors are two sons, Dr. Rush of Lancaster and Fred, Dubuque, Iowa; two brothers, William of St. Paul, and Peter of Burlington, Vermont, and two sisters, Mrs. Sophia Duff of Quebec, and Miss Edith, who had been making her home with Dr. Joseph.

Dr. Thomas P. Keenan, Lake Geneva, died of pneumonia on June 15th. He had been ill five days.

Dr. Keenan was born in Milwaukee, October 9, 1893. In 1916 he graduated from Chicago College of Medicine and Surgery and in 1917 enlisted in the medical corps of the army and served overseas, where he held the rank of captain. He began his practice in Lake Geneva in 1920 and since residing there had been active in the American Legion, Knights of Columbus, and the Walworth County Medical Society. At the time of his death, Dr. Keenan was president of the Walworth County Society.

He was a member of the Walworth County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow and two children, Letty June, 12 and John Thomas, 9; his parents, Mr. and Mrs. Thomas Keenan of Milwaukee and one sister, Mrs. Eileen Retelle, Madison.

Dr. Walter H. Sheldon, Madison, died on June 10th following several weeks' illness of an infection received while treating a patient.

He was born in Greenville, Michigan, Dec. 8, 1874, and came to Madison with his parents at the age of ten. He attended the University of Wisconsin for five years, receiving his Bachelor of Arts degree in 1896 and his Bachelor of Science degree in 1897. He was graduated from Rush Medical College in the year 1900 and following postgraduate study in Vienna and Berlin, entered practice in Madison with his father, the late Dr. Charles S. Sheldon, who for twenty-five years served as Secretary of the State Medical Society of Wisconsin.

While attending the University of Wisconsin, Dr. Sheldon was a member of the University football team.

He was a member of the Dane County Medical Society, the State Medical Society, and the American Medical Association.

Survivors are his widow and one daughter.

Dr. F. W. Kitzki, Milwaukee, died on May 28th.

He was born in Kurkau, Germany, in 1864 and was a graduate of the University of Berlin in 1898 and after coming to this country practiced in Wausau for several years before coming to Milwaukee.

He is survived by his widow, two daughters and one son.

BIRTHS

A son to Dr. and Mrs. Raymond P. Wiesen, Milwaukee, on May 4th.

A daughter to Dr. and Mrs. A. F. Kustermann, Milwaukee, on May 9th.

A daughter to Dr. and Mrs. J. A. McElligott, Milwaukee, on May 10th.

MARRIAGES

Dr. Lief H. Lokvam, Kenosha, to Miss Marian J. Owens, Madison, on June 25th.

Dr. W. C. Wotja, Fond du Lac, to Miss Audrey LeClaire, also of Fond du Lac on June 18th.

Dr. H. A. Jegi, Galesville, to Miss Ruby Purple, Galesville, on June 4th.

Dr. F. R. Zietlow, Genesee Depot, to Miss Olive M. Heffernanof, Norwalk, Wis., on June 1st.

Dr. Sigurd B. Gundersen, La Crosse, to Miss Eleanor Head, daughter of Mrs. Louis R. Head, Madison, at Stamford, Conn.

Dr. Harold G. Pomainville, Pittsville, to Miss Bernice S. Nelson, Madison, on June 18th at St. Patrick's Church, Madison.

SOCIETY RECORDS

New Members

Kate P. Newcomb, Boulder Junction.

T. J. Torpy, Minocqua.

John P. Kelly, 110 Main St., Pewaukee.

C. F. McCusker, Glenwood City.

Robert L. Fenton, Baraboo.

R. P. Bergwall, Hartland.

W. L. Krygier, 933 W. Mitchell St., Milwaukee.

S. K. Pollack, Milwaukee County Hospital for Mental Diseases, Wauwatosa.

Changes in Address

Adrian Frankow, Milwaukee to Security Bldg., West Bend.

C. G. Reznichek, Antigo to 2003 Winnebago St., Madison.

Alvin H. Brusky, Seymour to Northern Bldg., Green Bay.

B. Schlossmann, South Milwaukee to 208 E. Wisconsin Ave., Milwaukee.

MEDICAL ECONOMICS

WHO IS NEXT?

During the past two or three years there seems to have been an epidemic of malpractice suits. The standards of actual practice have been constantly increasing and we know that there has been no such sudden deterioration of service in our own state as would account for the increasing number of suits.

A rather careful investigation of several such suits leads one to the inevitable conclusion that a percentage were commenced as result of highly unjustifiable criticism by physicians who saw a case many months after the original treatment was rendered.

We are not among those who believe that criticism is never justified but we do hold that the physician who criticizes a brother practitioner to a layman should be held to strict account for the accuracy of his statements. Such criticisms generally are given offhand and without the slightest effort to ascertain the conditions that actually confronted the brother practitioner at the time and at the place when the original treatment had been given. And then there

is the physician who criticizes the efforts of his brother practitioners by inference, knowing full well that there would be no justification for a frank criticism.

We are happy to learn that our Committee on Medical Defense is maintaining case records and files pertaining to the cases that arise in Wisconsin. We trust that the Committee will have the cooperation of the entire membership in their efforts to stop this "raising of the eyebrows" type of criticism that has led to wholly unjustifiable suits in the past and has misled so many laymen into believing that they had claims, whereas the claims were so patently unjustified that the Court never permitted them to reach the jury. That type of action is costly to the misled patient as well as to the unfortunate physician.

LAWYERS TOO

Public health legislation is not the only type that has had "hard sledding" in the present legislative session. On June 18 the Assembly by a vote of 45–42 refused to kill, and then advanced, a bill designed to permit any notary public to engage in a limited practice of law. The bill would permit notaries to draw wills, deeds, mortgages, and all other legal papers not directly part of any court action. The extent of the bill will be better appreciated when it is remembered that any reputable citizen may become a notary public.

AND AGRICULTURE

Even science in the field of agriculture has had its turn in the present legislative session. The United States Department of Agriculture declared a certain "remedy" for Bang's disease to be nothing more or less than adulterated brown sugar. Yet the Assembly advanced a bill, over the protest of the Wisconsin Department of Agriculture, to carry on their own experimentation as to the merits of this product.

COLLECTION CHANCES

A recent investigation of the collection of several thousand commercial accounts produced some very interesting information. If accounts were allowed to run over 60 days, 10 per cent were lost. If accounts were permitted to go uncollected over 6 months, 33 per cent were lost. Accounts that ran over a year yielded but a 45 per cent return, while accounts that ran beyond the 2-year period yielded but a 23 per cent return.

At the same time it was brought out very clearly that professional accounts could not be placed upon the same basis as commercial accounts, in that the methods of commercial agencies were not adaptable in professional fields. Physicians, it was stated, must devise their own methods for collections, recognizing that the family frequently has not budgeted for this expense.

Much Can Be Done

That there is a great deal that physicians can do to expedite collections, was clearly stated by representatives of the University Extension Division at a recent meeting of the Wisconsin Credit Association. The points made pertaining to physicians' accounts were:

1. Securing information at the time the service is rendered and discussing the matter of payment in every case where the service required would involve more than a few dollars.

2. Mailing statements promptly,—preferably just before the first of the month.

3. Emphasizing the value of the service by itemizing so far as is possible. Thus, it was pointed out, instead of grouping house calls into a lump sum of $24 itemize each one.

4. Maintaining closer contact with the patient who has had a major operation by requesting that the patient report from time to time after discharged from the hospital.

5. Assuming the friendly, helpful attitude in collection methods that a physician uses in his professional service, so that the patient will be encouraged to discuss his financial problems as well as his future medical problems.

FOR THE WIDOW

When a members dies in Wisconsin, within just a matter of a few days, his family receives a letter from the State Society offering aid and warning against the "services" that are sure to be proffered by some types of collection agencies. The letter suggests that collection problems be discussed with a local attorney in whom the widow has confidence before any collection arrangements or proffered contracts are accepted.

If this is sound advice for the widow surely it is sound for the physician during his lifetime. Your State Society will report promptly upon the merits of any collection agency contract submitted to it. There is little that can be done for the member after he has signed a contract and finds it wholly unsatisfactory. Investigate before you sign,—it costs you but three cents.

SOUND LEGISLATION

Anticipating the uncertainties of the immediate future, the Council of the State Society has caused to be introduced a bill in the Assembly (733, A) extending the charter powers of the State Medical Society so that it may initiate any needed plan in event that such need develops in the future. The bill itself amends the State Society's charter by adding the following subsection:

"The state society, or a county society in manner approved by the state society, may undertake and co-ordinate all sickness care of indigents and low income groups, through contracts with public officials,

and with physicians and others, and by the use of contributions, co-operative funds and other means, provided only that free choice of physician within such contracts shall be retained and that responsibility of physician to patient and all other contract and tort relationships with patient shall remain as though the dealings were direct between physician and patient."

After three attempts to amend the bill so as to include osteopaths and optometrists had been defeated, the bill was advanced in the Assembly by the narrow margin of 45–43. Late in June the bill was passed in the Assembly without further discussion, and was to have a Senate hearing before the Committee on Education and Public Welfare on Tuesday, July 2. A senate vote was anticipated during the week beginning July 8.

IT CAME TO PASS

In the last issue of the Journal we made the comment on this page that, when the California Medical Association endorsed sickness insurance with the proviso that the legislature permit the medical profession to frame the plans, they were proceeding on an unwarranted assumption. We declared that California must have reached a Utopian stage if the legislature of that state would permit the establishment of a sickness insurance fund with all provisions as to medical service to be governed by the medical profession.

Now word comes from California that, while sickness insurance was not passed before the legislature adjourned, the State Society bill had been amended almost beyond recognition. In addition, both the Senate and the Assembly in that state have created interim committees to continue the study and present new drafts for legislation in the next session. We suspect that our brethren in California have been maneuvered into the position where they now have a bear by the tail.

MEDICAL DEFENSE

Members carrying medical defense who permit their dues to fall in arrears must remember that they are not entitled to medical defense if an action is commenced during the time that they are in arrears. Obviously it would be unfair to the fund and those members who depend upon it, if the Fund were to permit delinquent members to send in their dues the day they discovered that a suit had been commenced. Members are not considered in arrears until the first of April,—a ninety-day period of grace. If you are one who is now in arrears and you wish to have the medical defense offered by the State Society, most certainly you should pay your delinquent dues at once.

Plans Completed for Ninety-Fourth Anniversary Meeting at Milwaukee, September 17-18-19-20

WITH the announcement of guest speakers by Dr. John O. Dieterle, Chairman of the Committee on Scientific Work, plans are now completed for the ninety-fourth anniversary meeting of the State Medical Society of Wisconsin at the Milwaukee Auditorium on September 17, 18, 19 and 20.

Features of the ninety-fourth meeting will include:

1. Precessional dry clinics at Milwaukee County Hospital and Milwaukee Children's Hospital from 8:00 to 10:15 Wednesday morning, September 18th.
2. Distinguished out-of-state guests.
3. Sectional meetings on Thursday and Friday mornings.
4. The largest exhibit in the history of the Society.

Out-of-state speakers will include Dr. Louis G. Herrmann, assistant professor of surgery, University of Cincinnati, who will present his latest work on peripheral vascular disease, one of the recent outstanding contributions to scientific medicine; Dr. Ernest M. Hammes, St. Paul, professor of nervous and mental diseases, University of Minnesota; Dr. A. Graeme Mitchell, professor of pediatrics, University of Cincinnati; Dr. F. A. Coller, professor of surgery, University of Michigan; Dr. U. V. Portmann of the Cleveland Clinic; Dr. Percival Bailey, professor of surgery (neurosurgery) and neurology, The School of Medicine of the Division of the Biological Sciences, University of Chicago; Dr. Simon Levin, director of the medical service of the Isle Royal Mine, Upper Peninsula, Michigan, and Dr. Waltman Walters, associate professor of surgery, and Dr. Henry W. F. Woltman, professor of neurology, both of the Mayo Clinic and the Uni-

versity of Minnesota Graduate School of Medicine, Minneapolis and Rochester.

Following the clinics at County and Children's Hospitals from 8:00 to 10:15 Wednesday morning, a general session will be held at the Auditorium from 10:25 to 12:00 followed by an afternoon session from 1:30 to 4:30. A short evening session will precede the smoker Wednesday evening.

On Thursday morning from 8:00 to 10:30 sectional meetings will be held on genitourinary diseases, obstetrics and gynecology, internal medicine, and radiology, the general session completing the morning and from 1:30 to 4:30 in the afternoon. The annual dinner will be held on Thursday evening.

On Friday morning from 8:00 to 10:30, the program will be divided into sections for topics in the field of silicosis, tuberculosis and surgery. The general session will begin at 10:45 and the final general session will be held from 1:30 to 4:00.

The three days of the scientific meeting will be preceded by sessions of the House of Delegates on Tuesday evening, September 17th, and additional sessions of the House will be held early Wednesday evening, September 18th, and again Thursday morning, September 19th.

Sessions of the House of Delegates will be held at the Hotel Schroeder and all scientific sessions, with the exception of two dry clinics on Thursday morning, will be held in the various halls of the Milwaukee Auditorium.

A scientific exhibit under the direction of Dr. Eben J. Carey, Dean of Marquette University School of Medicine, will occupy fourteen booths in the general exhibit hall. In addition to the scientific exhibit, twenty-seven exhibitors will present technical exhibits. These exhibits include:

Bard-Parker Company, Inc., Danbury, Conn.
Bilhuber-Knoll Corporation, Jersey City, N. J.
The Borden Company, New York, N. Y.
R. B. Davis Company, Hoboken, N. J.
The DeVilbiss Company, Toledo, Ohio.
General Electric X-Ray Corporation, Chicago, Ill.
Gerber Products Company, Fremont, Michigan.
Horlick's Malted Milk Corporation, Racine, Wis.
Hurley X-Ray Company, Milwaukee, Wis.
E. H. Karrer Company, Milwaukee, Wis.
Kellogg Company, Battle Creek, Mich.
Kremers-Urban Company, Milwaukee, Wis.
Lea & Febiger, Philadelphia, Pa.
McIntosh Electrical Corporation, Chicago, Ill.
Mead Johnson & Company, Evansville, Ind.
Medical Protective Company, Wheaton, Ill.
Mellin's Food Company, Boston, Mass.
Merck & Co. Inc., Rahway, N. J.
Philip Morris & Co. Ltd., New York, N. Y.
V. Mueller & Company, Chicago, Ill.
Petrolagar Laboratories, Chicago, Ill.
Roemer Drug Company, Milwaukee, Wis.
W. B. Saunders Company, Philadelphia, Pa.
Scanlan-Morris Company, Madison, Wis.
Sharp & Smith, Chicago, Ill.
United States Hospital Supply Co., Minneapolis, Minn.
U. S. Standard Products Co., Woodworth, Wis.

Members—1935 House of Delegates

County	*Delegate*	*Alternate*
Ashland-Bayfield-Iron	C. J. Smiles, Ashland	R. O. Grigsby, Ashland
Barron-Washburn-Sawyer-Burnett	A. S. White, Rice Lake	
Brown-Kewaunee-Door	P. R. Minahan, Green Bay	W. M. Wochos, Kewaunee
Calumet	J. W. Goggins, Chilton	N. J. Knauf, Chilton
Chippewa	W. C. Henske, Chippewa Falls	C. T. Clauson, Bloomer
Clark	H. H. Christofferson, Colby	M. C. Rosekrans, Neillsville
Columbia	C. W. Henney, Portage	H. M. Caldwell, Columbus
Crawford	J. M. Sullivan, Prairie du Chien	E. T. Ackerman, Gays Mills
Dane	H. E. Marsh, Madison	W. T. Lindsay, Madison
	E. E. Schneiders, Madison	L. V. Sprague, Madison
Dodge	A. W. Hammond, Beaver Dam	R. R. Roberts, Beaver Dam
Douglas	C. W. Giesen, Superior	C. H. Christiansen, Superior
Eau Claire-Dunn-Pepin	F. E. Butler, Menomonie	R. N. Leasum, Osseo
Fond du Lac	D. J. Twohig, Fond du Lac	
Forest	E. G. Ovitz, Laona	G. W. Ison, Crandon
Grant	E. C. Howell, Fennimore	J. E. Donnell, Cuba City
Green	J. F. Mauermann, Monroe	W. G. Bear, Monroe
Green Lake-Waushara-Adams	A. J. Wiesender, Berlin	G. E. Baldwin, Green Lake
Iowa	M. T. Erickson, Highland	H. M. Walker, Dodgeville

County	Delegate	Alternate
Jefferson	H. P. Bowen, Watertown	W. S. Waite, Watertown
Juneau	Brand Starnes, New Lisbon	Carl C. Vogel, Elroy
Kenosha	A. F. Ruffalo, Kenosha	W. C. Stewart, Kenosha
La Crosse	N. P. Anderson, La Crosse	G. Gundersen, La Crosse
Lafayette		
Langlade	J. C. Wright, Antigo	L. A. Steffen, Antigo
Lincoln	H. G. Hinckley, Merrill	R. J. Henderson, Tomahawk
Manitowoc	R. W. Hammond, Manitowoc	L. W. Gregory, Manitowoc
Marathon	S. M. B. Smith, Wausau	E. E. Flemming, Wausau
Marinette-Florence	T. J. Redelings, Marinette	H. L. Jorgenson, Marinette
Milwaukee	Millard Tufts	W. A. Ryan
	N. E. McBeath	S. M. Markson
	L. W. Hipke	E. H. Gramling
	Charles Fidler	E. O. Gertenbach
	R. A. Toepfer, West Allis	W. F. Grotjan
	U. A. Schlueter	P. E. Oberbreckling
	W. M. Jermain	T. S. O'Malley
	Jos. Lettenberger	F. E. Drew
	F. D. Murphy	W. V. Nelson
	J. C. Sargent	R. E. Fitzgerald
	H. W. Powers	H. C. Schumm
	H. J. Gramling	A. R. Langjahr
	G. W. Neilson	Edward Jackson
Monroe		
Oconto	G. W. Krahn, Oconto Falls	J. S. Dougherty, Suring
Oneida-Vilas	W. S. Bump, Rhinelander	O. R. McMurry, Eagle River
Outagamie	A. E. Rector, Appleton	Albert B. Leigh, Kaukauna
Pierce-St. Croix	A. E. McMahon, Glenwood City	O. H. Epley, New Richmond
Polk	R. G. Arverson, Frederic	A. N. Nelson, Clear Lake
Portage	E. E. Kidder, Stevens Point	F. A. Marrs, Stevens Point
Price-Taylor		
Racine	H. B. Keland, Racine	T. C. Hemmingsen, Racine
Richland	B. I. Pippin, Richland Center	George Parke, Viola
Rock	P. A. Fox, Beloit	W. J. Allen, Beliot
Rusk	W. F. O'Connor, Ladysmith	J. C. Baker, Hawkins
Sauk	Edward McGrath, Baraboo	H. J. Irwin, Baraboo
Shawano	A. J. Gates. Tigerton	L. W. Peterson, Shawano
Sheboygan	A. C. Radloff, Plymouth	A. J. Knauf, Sheboygan
Trempealeau-Jackson-Buffalo	J. Paul Reinhardt, Fountain City	R. L. MacCornack, Whitehall
Vernon		
Walworth	S. G. Meany, East Troy	H. J. Kenney, Delavan
Washington-Ozaukee	J. G. Hoffmann, Hartford	H. M. Lynch, West Bend
Waukesha	H. A. Peters, Oconomowoc	H. T. Barnes, Delafield
Waupaca	J. W. Monsted, New London	Sam Salan, Waupaca
Winnebago	R. B. Rogers, Neenah	M. N. Pitz, Neenah
Wood	F. X. Pomainville, Wisconsin Rapids	K. H. Doege, Marshfield

Basic Science Exemption Bill Killed; Naturopathic Measure Fails in Assembly

TWO outstanding pieces of cult legislation failed in the Wisconsin Assembly during June. The first was the central point of attack of the chiropractors at this session of the legislature and provided that in the future chiropractors desiring to enter Wisconsin might have their examination under the Wisconsin Basic Science Board for Chiropractors rather than the Basic Science Board.

The second bill was to create a new cult to be known as naturopaths. This bill had the usual grandfather exemption clause so that anyone claiming to have been practicing naturopathy in Wisconsin on January first, last, would have until September 1, 1935, to satisfy the newly-created Board of Naturopathy of that fact and receive his license without further qualifications than the "diploma" from a school teaching naturopathic methods.

The attack on the Basic Science Bill was led by Assemblyman Vernon Thomson of Richland Center and Assemblyman Ray Novotny of Oshkosh. The bill was defended by its author, Assemblyman Busby of Milwaukee County, and part of the floor discussion follows:

"This bill vitally affects the welfare of the people of Wisconsin far more than the author would have you believe," said Assemblyman Thomson.

"The present Basic Science Law is fundamental. Anyone who pretends to treat the sick should have the fundamental knowledge required under the Basic Science Law before he tries to treat the sick. The fundamental laws are the same for every one who treats the sick. The subjects of anatomy, physiology, pathology, and diagnosis are the same regardless of the type of healing he professes to follow. It is not necessary for him to ask for an exemption on the basis that he has a separate anatomy, physiology, and pathology,—there is only one human body and it is the same regardless of how he intends to treat the human race.

"The majority party in this house has a great responsibility in regard to this measure. The trust of the people will be violated if it permits the passage of such a bill as this. It would seem as though there were some sort of unholy alliance between the majority party in this Assembly and the muscle-rubbing, back-scratching cults. The majority in this house is entirely responsible, should this measure pass."

"I hope", replied Assemblyman Busby, author of the bill, "that the members of the Assembly will not take too seriously the gentleman who has just spoken. The purpose of the bill is to take them out of the Basic Science Board and put them under the Chiropractic Board.

"The method in which the examinations are now made are unfair to the chiropractors. The board has, ever since it has been established, been using examiners who have been almost entirely M.Ds. This bill would place the chiropractors under the Chiropractic Board and the examinations would be given by the chiropractors who are skilled and proficient in chiropractic. This bill does not seek to exempt the chiropractors from taking a basic science examination. The dentists, Christian Scientists, nurses, chiropodists, and others are exempt from the Basic Science Law. I don't see why they should be. The chiropractors are not asking to be exempted. They are merely asking that they be given an examination by a Chiropractic Board. The present law operates unfairly to the chiropractors because of the composition of the board. The gentleman who has just spoken would have you believe that the Basic Science Board is impartial and disinterested. That is not a fact.

"I ask you gentlemen that when you have the composition of the Basic Science Board as it is now you give the strangle hold to the M.Ds. How can you expect these other men to survive? During that last ten years there have been only ten chiropractors who could pass the examination. In the last two years, none at all has passed.

"I have here that statement of the President of the Basic Science Board in which he says, 'We do not license anyone for anything. They have to pass through our hands. The type of "material" that has come before us is the type that we cannot pass.' We can deduct our own conclusion.

"This Basic Science Law was made and the Board has allowed enough chiropractors to pass so that they cannot come before the legislature and say that they have been frozen out,—that they were not cut out entirely.

"The result on the public has been that there have been unlicensed chiropractors in Wisconsin. Even when they have been brought before the court, the juries have refused to convict them because they have felt that the chiropractors have been discriminated against.

"In conclusion I would say that many sins are hidden behind that smoke screen. Many personal gains are hidden behind that smoke screen. This present Basic Science Board gives a strangle hold on the other profession. All we ask for is fair play."

Assemblyman Ray Novotny of Oshkosh then declared that the passage of this measure would tear down the standards that the state had wisely erected to protect the credulous sick, and moved the killing of the bill.

"It is correct that chiropractors have failed to pass the Basic Science examination," asserted Mr. Novotny, "but during that same time there were many of the men

who had gone to medical schools that failed to pass. The legislature was very wise in setting up requirements for people to treat the sick. The pharmacists, nurses, etc., do not have to pass the basic science examination because they are not treating the sick but only carry out the orders of the doctors.

"If we pass such a bill as this we are going to tear down the standards that people must have to treat sick people. We are going to say that anyone can go out and treat the sick without qualifications. The bill is simply a roundabout way to be exempted from taking the basic science examination. I have personally been treated by osteopaths and chiropractors. It is true they can rub and punch, etc., but they are not qualified to treat all the ills that beset the human body. I say to you that if we pass this bill we should turn around and tear down the medical schools that we have and save all the money we spend on them both here in Madison and at Marquette. I move the indefinite postponement."

The roll call showed forty-five voted to kill the bill and thirty-seven to pass it. A subsequent effort to revive the bill failed by a vote of 55 to 36.

NATUROPATHIC BILL

The naturopathic bill was advanced in the Assembly early in June by a viva-voce vote after an amendment by Assemblyman Vernon Thomson, which would have emasculated the measure, had been rejected on a roll call of 44 to 38. A subsequent motion to reconsider the action advancing the bill was defeated 45 to 42. When the bill came up for final passage, without discussion, the Assembly voted 68 to 20 against the measure. As this issue of the Journal went to press, a motion to revive the bill was pending for action on Wednesday, July third.

Assembly Votes 51-36 Killing Bill to Give Hospitals, Physicians and Nurses Right of Partial Assignment in Accident Cases

IN A LENGTHY debate in which hospitals and physicians were depicted to the Assembly as waiting to force patients to write "blank checks while under the influence of opiates", the Assembly on June 21st killed a bill to legalize partial assignments in accident cases. The effect of the measure would have been to insure hospitals and physicians of payment for reasonable emergency service in accident cases when the injured person was subsequently granted his accident insurance claim. Assemblymen Vernon Thomson, Richland Center, Frank Graass, Sturgeon Bay and Joseph Barber, Marathon, led the fight for the bill while Assemblymen Reuben Peterson, Green Lake, R. W. Trego, Merrill and David Sigman, Manitowoc, supported the position of the insurance companies in their intensive effort to kill the bill.

When bill 909, A, was reached in the Assembly on Wednesday, June 19th, Assemblyman Vernon Thomson, Richland Center, opened the debate by demanding a roll call on the committee recommendation that the bill be killed.

"This bill had its hearing before the Assembly Judiciary Committee and the recommendation that it be killed comes from the lawyers on that Committee," said Mr. Thomson. "I introduced this bill at the request of the Wisconsin Hospital Association and the State Medical Society of Wisconsin and I have made a most thorough study of it. I am personally convinced that it has great merit. It is true that to the layman the legal terminology is not clear but to the lawyer this terminology shows careful preparation to make the bill simple in its actual operation.

"It merely makes possible a legal partial assignment by the injured patient of such portion of any recovery he may later secure, sufficient in amount to care for the expenses of the hospital and the physician upon whom he called in his frequently great emergency. If you will make inquiries of your own hospitals you will find that they will tell you that at present one-half of their accident cases leave the hospital without paying their bills and that when these patients secure a settlement later, they conveniently forget all about paying the hospital.

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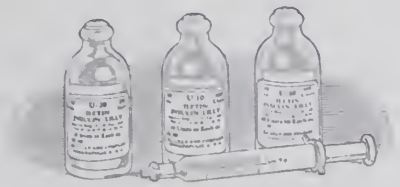

The Postprandial Specimen

Glycosuria in an untreated or inadequately treated diabetic is ordinarily most likely to occur and to be the most marked within two hours after a meal. Therefore, for diagnostic purposes, specimens of urine passed within two hours after a hearty meal are preferable to random or twenty-four-hour specimens. Iletin (Insulin, Lilly) is supplied through the drug trade in 5 cc. and 10 cc. vials.

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"I have in my hands a letter from the Madison General Hospital that asserts that fifty per cent of their accident cases never pay the hospital despite the fact that the hospital rendered them a service in a time of great emergency. If you will contact your hospitals at home, you will get exactly the same story.

"At present the law prohibits the patient from making a partial assignment of any recovery that he may later secure. This bill merely makes legal such an assignment in event that the patient makes it.

"In addition to the request of the Wisconsin Hospital Association, the gentleman from the fourteenth, Milwaukee, (Mr. Murray), has a telegram from the Wisconsin Section of the Catholic Hospital Association which he is asked to read on the floor, supporting this measure. I am sorry that he is absent at this time for I should like to hear that telegram which he showed me last Friday, read on this floor.

"Now the only opposition to this bill comes from the lobbyists of the insurance companies and from some attorneys. The insurance companies object because this bill would interfere with their make-quick settlements with the injured man. Just because the insurance companies want this bill defeated is no reason for its killing. There is real merit in the bill and I trust that it will pass this legislature."

Assemblyman James Hanson, Dane County, then asked for the committee report. This report showed that the bill has been supported by Assemblyman Thomson; Mr. George Crownhart, Secretary of the Wisconsin Hospital Association and the State Medical Society; Dr. R. C. Buerki, President of the Wisconsin Hospital Association, and Mr. Fred M. Wylie, Milwaukee, legal counsel for the Wisconsin Hospital Association. Appearing in opposition to the bill were representatives of the insurance companies.

Asserting that if he had known that the medical profession was supporting a bill of this type, he would have voted for the chiropractic and naturopathic bills, Assemblyman R. W. Peterson, Green Lake, led a frontal assault on the bill.

"It is on rare occasions that I oppose my roommate, Mr. Thomson," said Mr. Peterson. "The viciousness of this bill, however, leads me to take the floor. The adroit argument has been made to appeal to the prejudices of the members that only insurance companies and attorneys are against this bill. I have voted consistently for the doctors* but if I had known that they had planned to foist this kind of legislation on the public, I would have voted for the chiropractors and naturopaths.

"Pass this bill and you would permit doctors and hospitals to demand that patients sign these assignments with the threat that if they didn't sign, they wouldn't treat them. They would say, 'sign this or we won't treat you'. I don't say that all of them would but there are plenty that would.

"You can't legislate against dead-beats. This bill or no other bill will protect hospitals from dead-beats. What this bill does is simply to make the patient write a blank check in advance. The hospitals will just say, 'Here, Mr. Man, you are just out of a bad accident, but you sign right here on this line if you want us to take care of you'."

Mr. Peterson then read sections of the bill in his effort to prove that the bill was unfair and asserted that he was trying to protect the rights of the people who would be injured in the years to come. He asserted that the insurance companies would not have to pay more money but that it would delay the settlement.

"One provision of this bill states that the notice to be given insurance companies shall not be by registered mail (they don't want to make the hospitals pay even twelve cents) but that it is insufficient if it is filed in the county where the patient resides. Why, this bill would include partial assignments for the man who cut my lawn while I was injured. It protects lawn cutters and maids.

"DEVIL TAKE THE HINDMOST"

"Then again the bill states that the amount does not have to be specified. The doctors and hospitals," claimed Mr. Peterson, "are just trying to take care of themselves. They want to be first and the devil take the hindmost. Oh, I know they say that all this bill does is to 'allow' the injured patient to make a partial assignment. But the fact is that the vast majority of people will pay anyway and those who will not, should not be made to sign a blank check while under the influence of opiates lying on a stretcher waiting for attention. The Judiciary Committee reported this bill for killing by a vote of 8 to 3 and I hope this Assembly will support that Committee and kill this vicious bill."

"My roommate," retorted Mr. Thomson, "is dead wrong and I am sorry to see that he has strayed so far from the paths of righteousness and justice. I wish for the time essential to reply and inasmuch as we have a special order of business at this time, I am willing to waive further consideration until after we have disposed of that order."

The bill then went over until June 21st.

The bill was again reached in the Assembly on Friday, June 21. Debate on the measure was again opened by Assemblyman Vernon Thomson, sponsor of the bill for the Wisconsin Hospital Association and the State Medical Society.

"This measure is designed to protect the hospitals in Wisconsin against individuals who do not pay their hospital bills. There is no attempt on the part of the authors of this bill—the Wisconsin Hospital Association—to get a monopoly on any claims that may arise due to accidents. This bill is simply designed so that they may justly get what is coming to them under the circumstances.

"Several statements were made yesterday that were far-reaching. I wish to call to the attention of the members of this Assembly particularly the

* Mr. Peterson was correct in his statement.

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statement that was made yesterday that the hospitals could receive compensation and the individuals injured could receive compensation for injuries sustained by persons mowing the lawn or persons engaged in maid service."

Mr. Thomson then referred to the bill, pointing out that only those persons who were liable for such damages would be affected by this bill.

"Another statement that was made on the floor yesterday was to the effect that there was no provision for the amount of the charges that might be made against an injured person. I want to direct the members of this Assembly to the provision in the bill which provides that the recovery charges shall be reasonable charges only. The statement has also been made that this is a doctors' and hospitals' bill. I wish to point out to you that this bill first of all protects the attorney for his services.

"If you have a hospital in your territory and care to check with them, you will find that the figures given me by the Madison General Hospital to the effect that 50% of the automobile accidents are not paid for will be substantiated by your local hospital. I wish further to point out to you that, should your local hospital be a municipal one, the local tax-payers must pay for the hospital care of these injuries out of their property taxes—that is, this 50% that leave the hospital without paying their bills.

"This bill has been opposed by highly paid insurance company lobbyists who come around here button-holing each one of you and saying that the attorneys cannot close the case if this bill were enacted into law. This bill would not jeopardize the prompt and just payment of claims.

"The hospitals in Wisconsin can no longer afford to take care of the mounting burden of gratuitous guests in the hospital.

"This is a highly meritorious bill, and I hope that the Assembly will engross this bill."

Assemblyman Blomquist from Adams County then asked Mr. Thomson what effect this bill would have on the statutes which specifically state that no statement can be secured from an injured person within 72 hours of the time of injury and that these statements so secured are not admissible as evidence in court nor is the testimony of persons securing a statement in less than 72 hours permissible in court.

"A BLANK CHECK"

"Here's a bill," added Mr. Blomquist, "that will permit people to sign a blank check or a blank statement when they are injured and suffering from shock. I do not think that a person in an accident should be held responsible for any statements they make immediately after they are injured. I am surprised that the Hospital Association would come in with a request of this kind. When a person is injured, hurt, or doped, he must sign a statement as to his obligations."

Assemblyman Barber (M.D.) of Marathon County supported the bill stating, "This bill is in the interests of the citizens of Wisconsin and is a highly humane bill. Thousands of times physicians take these injured people to hospitals and they never pay their hospital bills or pay the physician. When a physician takes a patient to a hospital, the hospital expects and has confidence in the physician that they will get their money. There have been statements made on the floor that the hospitals and doctors will demand that these statements be signed before the injured persons will be cared for. No physician or hospital in Wisconsin will require the injured persons to sign this statement immediately after the accident. I don't think that there is a doctor in Wisconsin who would refuse to take care of these injured persons before they sign the statements provided for in this bill. This bill is a very good bill, and I trust that you will see fit to pass it."

Assemblyman Trego from Lincoln County then took the floor in opposition to the bill.

"The doctors and lawyers have been coming in here this session to organize and control everything they possibly can," declared Mr. Trego. "We have been here several months working in behalf of the interests of the people of Wisconsin. The lawyers have insisted that, in order to protect the people of Wisconsin, the wills must be drawn up by a lawyer so that wills shall be drawn while the person has just control of his faculties. In the face of all this, a bill like this is supported by lawyers contradicting all they have demanded in their previous bills. When a man is injured, sick, or unwell, then and there he must sign a statement like that which is called for in this bill. I think it is a crime to ask the sick and injured to sign these statements. This is one of the most criminal bills that has been introduced in this session. If we are going to consider this bill that will take a man when he is down and out and have him sign statements, we should go back and re-consider all the bills we have passed for the lawyers."

"NO LETTERS FROM PRETTY NURSES"

Assemblyman R. W. Peterson of Berlin took the floor again in defense of the lawyers and in opposition to the bill. "I am a lawyer and a member of the Judiciary Committee, and I was very much opposed to this bill, as were the other attorney members of the Judiciary Committee. It is true that I have not received letters from pretty nurses asking me to support this bill; neither does the Medical Society see fit to print my picture in the Medical Journal, stating that I am working here in Madison to do all in my power to help them. It is in the interest of the injured persons of Wisconsin and those who may be injured in the state that I have taken the floor.

"The insurance companies are not the greatest lobbyists in opposition to this bill, but the interests of the injured persons should be the prime motive in opposing this bill. The proponents of this bill would have you believe that most of the injuries for which people are hospitalized occur outside the

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home, but I am sure that you will find that insurance statistics will bear me out that the greatest majority of persons are injured in bath-tubs or on slippery floors. Most compensable cases are paid; the doctors and hospitals are paid for their services.

"The vicious part of the bill is this—when a man could be under the influence of drugs or shock, he could be prevailed upon to sign a blank check. Here is the effect it would have. Suppose an injured person were taken to a hospital and suppose that some reliable person were responsible for the injury sustained. Now, if this injured person were known to be in moderate circumstances, the hospital would put him in a ward or in a one-window bedroom and the doctors would not make any more calls than were absolutely necessary. I know that the vast majority of hospitals in Wisconsin would not take undue advantage of the provisions of this bill, but I do know that some hospitals and some doctors would take advantage of this bill. They would give this man of moderate circumstances an expensive room and the doctors would make numerous calls and some of the doctors would probably charge higher prices. The proponents of this bill say that charges must be reasonable, but here is what would happen. The injured person of moderate circumstances would have to go into court and prove that the charges were unreasonable and would have to prove that it was not necessary for him to have such high-class care. I feel absolutely that the doctors are entitled to their pay and the hospitals are entitled to their pay, but I do not see how this is a corrective measure. Those who do not intend to pay their doctor or hospital bills would refuse to sign the statements called for in the provisions of this bill. I do not see how the present evils are going to be corrected. I feel that more evils will be added than will be corrected."

Assemblyman Sigman of Manitowoc County then offered an amendment which would have provided that these assignments were not to be made prior to the time that the patient left the hospital. Assemblyman Sigman stated, "Many people would sign these statements in order to get into the hospital. They might sign something they would regret later. This amendment would provide that the person might sign the assignment after he had recovered or after he left the hospital."

Assemblyman Thomson then took the floor and asked for the rejection of the amendment and asked for a roll call.

Assemblyman Graass from Door County took the floor to support this bill by reading a letter from the President of the Wisconsin Hospital Association, stating further, "There has been a lot of talk injecting the doctors and lawyers into this bill. This bill is not for the gain of either but is for the protection of the hospitals. I hope that this amendment is rejected and the bill engrossed."

"The hospitals in Wisconsin are nothing more than charitable institutions. I rank the hospitals in this state the same as our schools and churches. They are non-profit organizations and I would like to ask any member of this Assembly to point to any one or to any group or to any institution that puts out as much charity as do the hospitals or doctors in Wisconsin. Every hospital in this state is forced to accept a tremendous number of accident cases every year. I would like to cite to you an example that occurred in my county. A summer tourist fractured her hip and when they took her into the hospital the only assets she had were $10. They kept this lady there with the fractured hip for two months. Then this lady became restless and demanded that she be discharged from the hospital. The hospital and the doctors cautioned and advised her that immediately upon her return home she should get in touch with her doctor for further care. Now all the hospital got out of this was $10, and they kept here there for two months, and the doctors got nothing. Now this same lady is suing the hospital for $15,000 because she claims that they did not take proper care of her. I understand that she got something like $20,000 for her settlement for the injuries sustained in the accident. On top of that, she is suing the hospital for an additional $15,000. The doctor received nothing, and all the hospital got was $10. I would like to ask the members of this Assembly who runs the hospitals in Wisconsin, particularly who runs two-thirds of the beds in Wisconsin. You will find that the Catholic hospitals and the Methodist-Lutheran hospitals run two-thirds of the hospital beds in Wisconsin. These people are active charitable institutions and are working in the interest of the public. I want to say to you that, if it had not been for the angels of mercy, even those institutions that are now running would not be in existence. I presume that it may reasonably be charged that a case here and there might take place in which the injured person would be taken advantage of. As I said to you, two-thirds of the hospitals are Methodist, Lutheran and Catholic hospitals. Do you mean to tell me that these Sisters are going to have the patients sign documents before they are taken care of? I know that these places are 'gyped' far more often than they can possibly 'gyp' anyone. Do you believe that the hospitals in your community will demand that they sign these documents before they render the service?"

"I am really sorry that a religious issue has been brought into the discussion of this bill," retorted Mr. Peterson, "Religion should not be brought into a measure of this type. I am sure that there are many Assemblymen in this Assembly that have read in newspapers where hospitals have attempted to hold babies until they could secure their pay for the services rendered. There will be some hospitals and some doctors that will take advantage of the injured people. I am ready to admit that good doctors are not going to take advantage of this bill should it pass."

The Assembly then rejected the amendment by a vote of 61-25.

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The question then before the House was: "Shall the bill be indefinitely postponed (killed)?"

The roll call follows:

Voting to kill the bill—Alfonsi, Baker, Barnes, Bay, Beggs, Bergren, Bichler, Blomquist, Brandt, Busby, Goldthorpe, Douglass, Dueholm, Franzkowiak, Fuhrman, Garvens, Grimes, Grobschmidt, Halvorsen, Handrich, Hanson, Hitt, Jackson, Johnson, Kaiser, Kelly, Kiefer, Koegel, Kostuck, Kretlow, Kroenke, Kryszak, Laabs, Ludvigsen, Lynch, Michalski, Millar, Peterson, E. C., Peterson, R. W., Pritchard, Robinson, Ryan, Schenk, Schilling, Sibbald, Sigman, Staudenmaier, Sweeney, Trego, Wegner and Young—51.

Voting to pass the bill — Barber, Cavanaugh, Daugs, Foley, Graass, Grassman, Grosvenor, Groves, Hamata, Harper, Hemmy, Hipke, Hoesly, Howard, Kronschnabl, Krueger, Laack, La Bar, Lomsdahl, Murray, Nelson, O'Malley, Poltl, Rakow, Shimek, Sieb, Siebert, Stone, Swanson, Theisen, Thomson, Vaughan, Vogel, Woerth and Mr. Speaker—35.

Absent or not voting—Caffrey, Fitzsimons, Genzmer, Hall, E. D., Hall, M. H., Inman, Meisner, Mulder, Nelis, Novotny, Olson, Peterson, T. A., Short and Weissleder—14.

Paired—Novotny for indefinite postponement (killing) of the bill, Inman against.

Mr. Kostuck stated that he had intended to vote "no" instead of "aye" on indefinite postponement.

Physicians and Hospitals Exempted From New Alcohol and Medicinal Liquor Fee; Out-of-State Purchases Approved

OF PARTICULAR interest to the doctors and hospitals located in the State of Wisconsin is Assembly Bill No. 237A, which was recently passed by the legislature and signed by the Governor. This bill was published in the official State Paper June 27, and became effective June 28, 1935, as chapter 187, of the laws of 1935.

This bill, introduced by Assemblyman Cornelius Young, contained the recommendations of State Treasurer Robert K. Henry and was vigorously supported by him.

Under the former liquor laws Wisconsin hospitals and doctors could only purchase alcohol for medicinal purposes from licensed Wisconsin manufacturers, rectifiers, and wholesalers. They could not purchase alcohol from sources outside the state and in that way were unable to take advantage of the lower prices offered by out-of-state firms. Many instances were reported where Wisconsin hospitals and doctors paid as high as thirty to forty cents per gallon more for alcohol than they would have paid had they been able to purchase from sources outside the state.

Alcohol used for such non-beverage purposes, or intended for medical purposes, is tax-exempt under the law. The main difficulty encountered by the doctors and hospitals was in obtaining alcohol intended for such uses.

Robert K. Henry

State Treasurer Robert K. Henry early last summer felt that this was an injustice of the law and that steps should be taken as quickly as possible to remedy this situation by legislative action. Pending such action the State Treasurer took steps by regulation whereby alcohol intended for such purposes could be obtained for Wisconsin hospitals and doctors from sources outside of

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FOR the seventh year Parke, Davis & Co. is continuing its series of messages to the public, published in the interest of the physician. These advertisements appear in the *Saturday Evening Post, Time, News-Week, Hygeia* and other leading magazines. Our purpose is to bring physician and patient closer together—to strengthen the public's confidence in the most honored of all professions. These messages are suggesting the earnest co-operation of the individual with the physician and are urging a reliance on the physician's knowledge and skill.

THIS "See Your Doctor" campaign is of particular importance at the present time, when so may diverse forces are complicating the status of the medical practitioner.

Since the beginning of the series, many physicians have requested copies of these advertisements and we have presented them from time to time in portfolio form. We have recently printed a new edition under the title "Your Doctor and You." The cover bears a photographic illustration designed to interest your patients. The booklet includes the following messages:

The letter that took him months to write.
The Peaceful Years.
There, dear . . . we needn't worry about scarlet fever now.
Dear Doctor: It was just a year ago today . . .
The Tragedy of a Good Intention.
Things I wish my mother hadn't taught me.
Which is the more dangerous age?
This little girl has three parents.
You don't believe in doctors?
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the state, directly under state supervision. This relieved the situation greatly.

As soon as the legislature met, Mr. Henry had ready for introduction Bill No. 237A which contained section 176.404 of the statutes, relative to medicinal permits. That section of the law reads as follows:

176.404 MEDICINAL PERMIT. (1) Any person who proves to the state treasurer that he uses alcohol for medicinal purposes may be issued a "medicinal alcohol permit" which shall allow such person to purchase and use alcohol for such purposes only.

(2) Shipments made of such alcohol shall be conspicuously labeled "for medicinal purposes" and shall meet such requirements as the state treasurer may prescribe by regulation.

(3) Such permit shall be issued by the state treasurer without fee.

Originally the bill provided that a permit should be issued for a fee of $10.00.

The bill passed the Assembly providing for a $10.00 permit. The bill was scheduled for hearing before the Senate Committee on State and Local Governments.

Mr. Fred L. Holmes and Mr. Crownhart called upon Mr. Henry and stated to him that the $10.00 fee, although appearing nominal, would create a hardship upon many of the hospitals and doctors located in the State. They stated that hospitals were in more or less a quasi-public position and that many of the hospitals and doctors were operating at a loss, or on a small margin of profit, due to the recent depression years. Mr. Henry realized the merits of their arguments and agreed to recommend to the Senate Committee that such permits be issued without a fee.

Mr. Henry introduced an amendment to this bill to that effect and this amendment was adopted.

Interviewed as to what type of regulations would be promulgated by him, Mr. Henry stated that he has not as yet definitely drawn up regulations covering this type of permit. Within the near future application blanks will be supplied all doctors and hospitals upon request. When this application blank is properly filled out and notarized a medical permit will be issued to doctors and hospitals who qualify.

"Alcohol intended for non-beverage uses, and which is tax-exempt under the statutes, must be closely watched because bootleggers are diverting tax-exempt alcohol into beverage fields with subsequent loss of revenue to the state. It is for this reason that I perhaps will have to demand periodical reports from all hospitals and doctors regarding the shipments that they received so that these can be checked against the out-of-state firm to assure that there has been no diversion enroute," stated Mr. Henry.

"I intend making the regulations relatively simple so as to avoid any extra work for both hospital and doctors and the state. They will be as simple as possible and yet assure proper protection for the state."

"As soon as we have definitely drawn our regulations on this matter a letter explaining this in full will be sent to your organization for proper release."

Dr. Hunter New Director State Bureau of Maternity and Child Welfare

DR. AMY Louise Hunter has been appointed to the position of supervisor of the bureau of maternity and child welfare to succeed Dr. Charlotte J. Calvert, resigned.

Dr. Hunter is a graduate of Vassar and received her Masters degree from Cornell. After a period of teaching in Vassar and Wellesley the subjects of nutrition and physiology, Dr. Hunter entered the University Medical School of Yale from which she graduated in 1930. She served her interneship at the Babies' and Children's Hospital, Cleveland, Ohio, for a period of one year. She filled the position as resident physician, Children's Community Center, New Haven, and acted as clinical instructor in pediatrics at the Yale University School of Medicine. She then became associate pediatrician for

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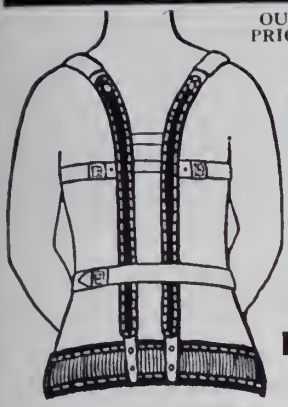

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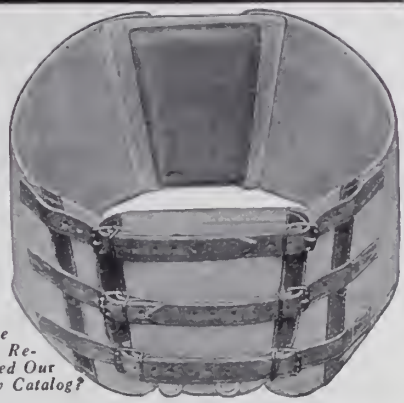

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prenatal and postnatal research at Antioch College, Yellow Springs, Ohio, serving in such position for a period of 16 months.

Becoming fully imbued with the idea of the importance of child welfare and the opportunities offered in such field, Dr. Hunter resigned her position at Antioch, returned to Yale and completed the two years' public health course at Yale University in 1934, following which she was assigned to the duties of collaborating physician in a nutrition survey for the University of Maine.

Dr. Hunter is a Fellow of the American Public Health Association.

THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

Psychology Applied. By George W. Crane, Ph.D., department of psychology, Northwestern University; consultant in business and industrial psychology; five years research psychologist under auspices of the National Research Council of America, and the Carnegie Institution of Washington, D. C. Northwestern University Press, Chicago, Ill.

The Woman Asks the Doctor. By Emil Novak, M. D., associate in gynecology, Johns Hopkins Medical School. The Williams and Wilkins Company, Baltimore, 1935.

Emotions and Bodily Changes. By H. Flanders Dunbar, M. D., Ph.D., departments of Medicine and Psychiatry, Columbia University. Columbia University Press, 2960 Broadway, New York, N. Y. Price $5.00.

Clinical Laboratory Methods and Diagnosis. By R. B. H. Gradwohl, M. D., director of the Gradwohl Laboratories; director of the Gradwohl School of Laboratory Technique; director of Laboratories, St. Louis County Hospital; chief of staff and pathologist to Christian Hospital; lieutenant commander, medical corps, fleet, United States Naval Reserve. With 328 Illustrations in text. C. V. Mosby Co., St. Louis, Mo. Price $8.50.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

Clinical Management of Syphilis. By Alvin R. Harnes, M. D., Chief of Congenital Luetic Clinic, New York Hospital. Price $1.50. The Macmillan Co., New York.

This small handbook of only 65 pages is an outline of the author's conception of the treatment of syphilis. It is characterized by a series of tables in which the details of treatment are given day by day and week by week for a period of three years. These therapeutic rules are augmented by suggestions regarding certain cardinal points which he considers are not commonly known and which should be known. R. L. M.

Doctors and Juries. By Humphreys Springstun of the Detroit Bar. Price $2.00 net. P. Blakiston's Son & Co., Inc., 1012 Walnut St., Philadelphia, Pa.

The book is a brief, non-technical discussion of the legal aspects of medical practice. It should serve as an excellent guide for the doctor in avoiding malpractice litigations and aid him in offering testimony relative to his profession. F. L. K.

ULCERS

(Continued from page 477)

sary delay); (8) institution of proper follow-up procedures in each case.

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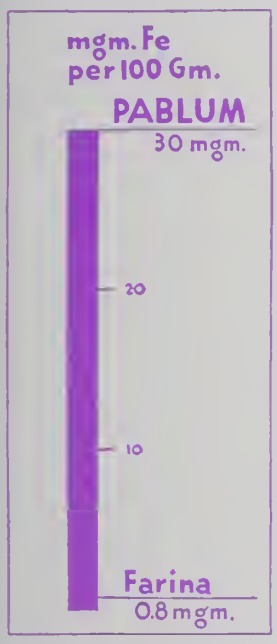

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IN THIS ISSUE

PEPTIC ULCER
F. Gregory Connell, M. D.
D. J. Twohig, M. D.
SEDIMENTATION RATE
John A. Schindler, M. D.
W. B. Gnagi, M. D.
DISEASES OF CERVIX
Carl Henry Davis, M. D.
ANNUAL MEETING PROGRAM
See pages 571 to 576

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TABLE OF CONTENTS PAGE 520

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The findings of the physical chemist as to the rate of penetration of heat into the food are combined mathematically with data obtained by the bacteriologist on the thermal resistance of spoilage micro-organisms (2).

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(1) The Art of Preserving, M. Appert, Black, Parry and Kingsbury, London, 1811.

(2) Thermal Process Time for Canned Foods, C. O. Ball, Natl. Res. Council Bulletin, v. 7 No. 37, 1923.

(3) Preventive Medicine and Hygiene, M. J. Rosenau, Appleton-Century, N. Y. 5th Ed. 1927.

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TABLE OF CONTENTS

ORIGINAL ARTICLES

Page

Peptic Ulcer by F. Gregory Connell, M.D., Oshkosh ---- 527
Cause of Peptic Ulcer by D. J. Twohig, M.D., Fond du Lac ---- 530
The Sedimentation Rate in General Practice by John A. Schindler, M.D., and W. B. Gnagi, M.D., Monroe ---- 531
Diseases of the Cervix Uteri by Carl Henry Davis, M.D., Milwaukee ---- 536
Antivirus Treatment of Ulcerative Colitis by E. J. Oesterlin, M.D., Springfield, Ohio; A. W. Johnson, M.D., and Jack Kinsey, M.D., of Milwaukee, and Thomas Willett, M.D., West Allis 538
The Treatment of the Patient Who Has Heart Failure by Louis M. Warfield, M.D., Milwaukee ---- 546
Early Spondylolisthesis; Case Report by Ralph M. Carter, M.D., Green Bay ---- 552
Surgical Treatment in Pulmonary Tuberculosis at the Wisconsin State Sanatorium by R. D. Thompson, M.D., Superintendent—E. K. Steinkopff, M.D., K. G. Bulley, M.D., and C. M. Yoran, M.D., Staff Physicians, Statesan ---- 553

EDITORIALS

Page

Balance ---- 556
Treatment of Constipation ---- 557

MISCELLANY

President's Page ---- 560
Society Proceedings ---- 562
The Woman's Auxiliary ---- 563
News Items and Personals ---- 567
Radio Program ---- 567
Marriages ---- 567
Deaths ---- 568
Society Records ---- 568
Medical Economics ---- 568
Chiropractic–Naturopathic Program Fails in Wisconsin Legislature ---- 570
Preliminary Program Announced for Ninety-Fourth Anniversary Meeting in Milwaukee, Sept. 17–20 ---- 571
Annual Meeting Preliminary Program ---- 574
Members—1935 House of Delegates ---- 576
Reports of Officers and Committees ---- 577
Exchange Advertisements ---- 595
Hobby Exhibit Planned for Milwaukee Meeting 598

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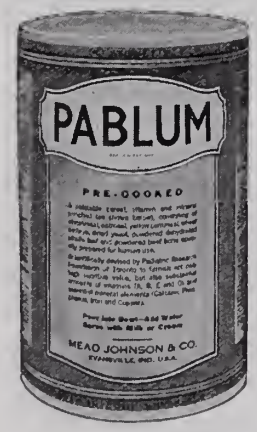

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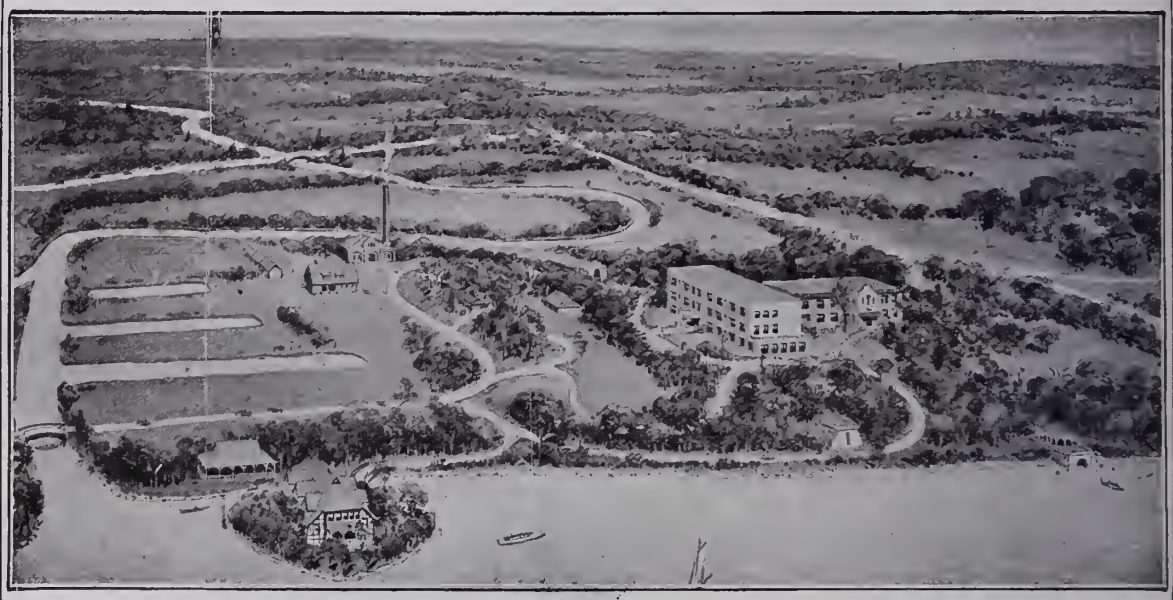

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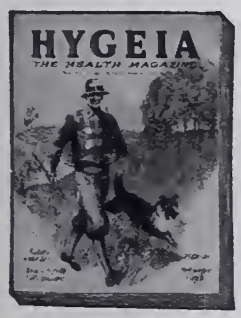

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Peptic Ulcer*

By F. GREGORY CONNELL, M. D.
Oshkosh

OF THE many phases of this subject, we are probably most interested in that of its "cure".

The multiplicity of more or less conflicting "treatments" may be due, in part at least, to a failure to appreciate the importance of certain fundamental preliminaries, such as: (1) familiarity with normal gastrointestinal functions, (2) with the natural course of untreated peptic ulcer, (3) knowledge of history, signs, symptoms and laboratory findings (that may justify a diagnosis) and (4) of the etiology (so that causative factors may be removed or counteracted).

The first will be taken for granted, the second will prevent confusion between "relief of symptoms" and "cure of disease". The third, is very important because upon its accuracy must be based all conclusions concerning the results of therapy.

The diagnosis is difficult because ulcer may exist with, or without, symptoms; symptoms may exist with, or without, ulcer.

Differentiation between functional and organic disease is necessary and the fact that the former may merge into the latter may cause confusion.

Because of the necessary relationship between cause of disease and rational therapy, the etiology, the fourth fundamental factor, is of primary importance.

Because of the well known tendency of the gastroduodenal mucous surface toward prompt healing after injury, the question from a practical standpoint is not what is the cause of peptic ulcer, but what is the cause of its chronicity? Why does the ulcer not heal?

The cause is, as yet, unknown; it is probably multiple and may differ with circumstances and conditions.

Possible basic etiologic factors may include such diverse circumstances or conditions as: nervous, vascular, bacterial, mechanical, dietary or other abnormalities; endocrine, acid-base, vagus-sympathetic, or other imbalances; chronic gastritis, allergy, constitutional inadequacy or a so-called "ulcer diathesis".

In reviewing and analyzing these various suggestions, one finds a striking common denominator and that is gastric hyperfunction which may be secretory (hydrochloric acid and pepsin) or may be mechanical (motility and tonicity).

Motor function, depending upon a delicate balance between the sphincters, peristalsis and tonus, is considered, by some, to be of equal importance with secretion, but as a rule in uncomplicated ulcer they are both increased.

The relative importance of over-secretion of hydrochloric acid or of pepsin has not been definitely determined, but there seems to be, as a rule, a constant correlation between acid and pepsin. Pepsin is not active except in an acid medium.

Without hydrochloric acid there is no peptic ulcer (the few exceptions are probably incorrect observations based upon incomplete studies).

The etiologic importance of hydrochloric acid is emphasized by the usual sites of peptic ulcers. Regardless of their location they are found *always* adjacent to acid-secreting mucous membrane.

Granting the etiologic importance of hyperchlorhydria, the next question would rationally be, what causes the gastric hypersecretion? But before this may be intelligently

* Presented before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, Sept. 1934.

discussed one must ask, what causes normal gastric secretion?

To quote Bradley, "It is not possible, as yet, to describe in detail the mechanism of the secretion of hydrochloric acid. There can be no doubt that the blood base chlorides are the raw materials for gastric hydrochloric acid and that a mechanism exists for converting these simple chlorides into hydrochloric acid which diffuses outward into the stomach (free or combined) while the basic component diffuses in the opposite direction into the blood stream." (Not unlike the blood change in the lung with the intake of oxygen and give-off of carbon dioxide.)

"The phenomenon of 'alkaline tide' is as authentic as is the presence of hydrochloric acid in gastric juice.

"NaCl plus H_2CO_3 equals HCl plus $NaHCO_3$."

Gastric secretion occurs in three phases: First, cerebral, or psychic, which serves as a self starter and initiates the gastric function.

Second, gastric, after the ingestion of food, by mechanical or chemical stimulation (the antral hormone of Edkins has not been accepted).

The third and perhaps the most important phase follows the entrance of food (chyme) into the intestine where degredation products of protein catabolism (proteoses, peptone and amino-acids, such as histamine) are absorbed and carried back to the gastric glands and serve as secretagogues.

The reabsorption of chlorides *from;* and the secretion of alkaline pancreatic juice *into* the upper small bowel, influence the acid-base equilibrium and in turn the gastric secretion.

Abnormal gastric function (hyperfunction) may be the result of various disturbances in normal relationships. Any irritant either psychic or physical (from allergy to zoogamy) may act as causative factors.

The element of heredity, of "ulcer diathesis", or constitutional inadequacy, may be important. (The different cutaneous responses to certain irritants in blondes and brunettes suggest the possibility of similar variation in mucosal irritability).

Not only acid *secretion* but also acid control is important; the latter concerns: the actual percentage of acidity at the time of secretion and the degree of dilution, by antral secretion, and duodenal regurgitation.

Breakdown or interference with the control mechanism would, of course, result in abnormal acidity.

(Gastric hypersecretion has a tendency to perpetuate itself by establishing a vicious circle).

The irritable hyper-acid gastric contents upon passing into the duodenum might cause irritation, inflammation, erosion or ulceration; which in turn would cause abnormal secretion, or allow absorption of abnormal irritants into the circulation; which are then carried to the acid-secreting cells of the stomach wall, resulting in hypersecretion thus completing the vicious circle.

TREATMENT

After arriving at an understanding as to the etiology, one may now discuss the matter of treatment in a more rational manner.

Indications for treatment:

Surgical: Hemorrhage after second attack of bleeding. Perforation. Obstruction. Gastric ulcer (because of the malignant potentialities).

Medical: Hemorrhage during and after first attack. Duodenal ulcer after one, two, or more "cures".

The aim of treatment (if accepted medical and surgical methods of treatment may serve as criteria) is to reduce the gastric acid, symptomatically by neutralization after secretion or radically by diminution of areas capable of secreting hydrochloric acid.

Time will allow but a brief discussion of only the rational causative or radical type of treatment which may be divided into non-operative and operative.

Non-operative measures aim:

To diminish the intake of secretagogues: of protein or other food that may break down into amino-acids, or of a constituent of HCl (low chloride diet), or

To destroy or eliminate the secretagogues *before* their absorption.

Normally the digestive function allows:

The passage of beneficial substances *into* the body,

- TREATMENT
  - Prophylactic:
    - Correct Diagnosis
    - Recognition of "Intractable Ulcer", avoidance of G.E.
  - Symptomatic: (Palliative)
    - Medical:
      - Neutralization:
        - Diet: (foods)
        - Medicine: (alkalies)
        - Demulcent (mucin)
      - Antispasmodics: Rest
    - Surgical:
      - Jejunostomy, gastroenterostomy. Exclusion operations.
      - Pyloroplasty
      - Resection:
        - Duodenal, pylorectomy
        - Gastrectomy, partial, subtotal.
  - Causative (Radical)
    - Medical:
      - Diet, salt-free
      - Non-specific protein therapy
      - X-ray
      - Antisecretagogue:
        - Atropine
        - Ephedrine
        - Epinephrine
        - "Anti-histamine"*
    - Surgical:
      - Nerve resection
      - Fundusectomy

* Since this was written, Prof. Ivy of Northwestern has isolated a substance "Enterogastrone", which experimentally acts as an antisecretagogue.

Passage of detrimental substances *through* the digestive canal and out of the body.

In deficiency diseases nutritive substances pass through the digestive tract instead of into the body.

With toxic diseases non-nutritive substances pass into the body instead of through the digestive tract.

Limited clinical experience with attempts at "neutralization" of "autointoxication" (?) have not been encouraging.

A third and seemingly rational method would be that of counteracting the secretagogue *after* its absorption by the administration of antisecretagogues.

Such therapeutic measures are theoretical, and clinical results, in unquestionable cases of peptic ulcer, are too few to allow conclusions. ("Enterogastrone" (Ivy) is very promising experimentally.)

Operative measures attempt to interfere with the autonomic nervous system, or positively minimize the acid-secreting surface of the stomach by partial fundusectomy. Division of the vagus and of the sympathetic has not been satisfactory.

The partial fundusectomy is technically simple and practicable; has a physiologic basis and is offered as a compromise between gastroenterostomy (which, by some, is considered as too conservative) and subtotal gastrectomy (which, by many, is looked upon as too radical).

The inadequacy of usual surgical methods with intractable ulcer is demonstrated by cases in which multiple operations, with removal of more and more of the fundal or proximal portion of the stomach, were necessary before cure.

Had the fundal, acid-secreting, portion of the stomach been removed in the first attempt, there is reason to believe the other procedures might not have been necessary.

Up to date partial fundusectomy has been performed clinically in 7 cases* (A. S. 1934). The first (see A. S. Aug. 1932), an intractable case, has remained symptom-free since the operation in 1931.

* Since this was written the total number of clinical cases is now twelve.

ANNUAL MEETING PLANS

The preliminary scientific program for the Milwaukee meeting of the State Medical Society of Wisconsin, September 17–20, will be found on page 571 of this issue. Read the program and plan now to attend.

Cause of Peptic Ulcer*

By D. J. TWOHIG, M. D.
Fond du Lac

A SATISFACTORY explanation of the pathogenesis of ulcers of the stomach and duodenum is not yet to be found. From the first it has been a controversial subject regarding which there are many divergent views. Until an acceptable explanation is reached, we cannot look forward to the prevention of ulcer, and physicians and surgeons will differ widely in their views regarding the proper therapeutic regime to follow in the active stage and how to prevent its tendency to recur when once healed. Those surgeons who believe that most ulcers should be operated also differ in the procedures which they advocate for its cure or alleviation.

The literature on the cause of ulcer is enormous and numerous explanations have been offered. Old hypotheses long forgotten are from time to time revived with some slight modification, that the fact that in defense of each one of them a strong brief could be written, means that in all probability more than one causative element must be concerned. It is indeed quite possible that the several hypotheses—vascular, traumatic, bacterial, biochemical toxic, neurogenic etc., are capable of being harmonized at least to some extent.

I have for many years believed that a combination of the vascular and chemical theories is the most logical explanation in the etiology of gastric and duodenal ulcer.

Very significant indeed is the incident of peptic ulcer of Meckel's diverticulum with its typical characteristics and also umbilical cysts or fistulas in which also gastric mucosa may be found. This, I think, is the strongest evidence there is to substantiate the belief that the chemical secretions of the stomach play a very important part in the cause of gastric ulcer. Therefore, the operation of fundusectomy is based on a very scientific and logical foundation, and, while I have had no personal experience with it, it should be the operation of choice in many cases. However, I believe we should be guided in the operation of choice by securing a very definite history on all cases, especially as to duration, response to medical treatment, recurrence, etc., and also by the type of lesion we find at operation.

CASE REPORTS

To substantiate this statement, I wish to report three cases:

Case No. 1. The first, a woman 32 years of age, a stenographer. Operated in 1927 for a fibroid of the uterus at which time a subtotal hysterectomy was done and an appendectomy. She had an attack of what was diagnosed ulcer of the stomach in 1930. She was treated medically and put on a diet and the condition cleared up and she was apparently completely relieved in six months. I saw her on June 6, 1932, when she was complaining of the same symptoms as she did in 1930. I put her on a diet and alkaline treatment which she followed until May, 1933. An x-ray picture was taken in June, 1932, at which time the stomach emptied completely. Another picture was taken in May, 1933, at which time there was evidence of a slight retention. I then advised an operation and she was operated June 2, 1933. An exploration of the stomach revealed a distinct indurated mass which involved both sides of the pylorus. A gastric resection was done and a microscopical examination of the tissue showed that there was an old ulcer that was beginning to become malignant.

Case No. 2. A woman 54 years of age entered St. Agnes Hospital December 23, 1931. Her history was negative except that she had been losing some weight and was somewhat weak for the past few months. She had some pain in the region of the stomach and she had been treated for gastric ulcer. The x-ray diagnosis was an ulcer of the stomach. She was operated upon on January 5, 1932, and an indurated mass was found on the gastric side of the pylorus. A resection of her stomach was done. The microscopical report in this case was an early malignancy.

I cite these two cases for the purpose of showing that it is very necessary to select your cases in case of fundusectomy, as it was impossible to tell on either of these cases that it was carcinoma at the time of the operation. Therefore, I believe in cases where there is some induration that the resection is still the operation of choice.

*Presented before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, Sept. 1934.

Case No. 3. F. L., a farmer 51 years of age, entered St. Agnes Hospital June 14, 1931. He gave a history of having had a gastroenterostomy done for ulcer of the stomach 20 years before. For ten years following the gastroenterostomy he enjoyed good health. Then he began having gastric symptoms again and after treating for sometime with the local doctor, he went to the Mayo Clinic at Rochester, Minnesota. After an examination, they prescribed diet and medical treatment and he was asked to return from time to time for observation which he did. This procedure lasted over a period of several years. Then they decided to operate again, at which time the gastroenterostomy was disconnected and a new gastroenterostomy made farther over on the fundus of the stomach. This procedure gave him no relief, as he was having the same trouble over again within a year. He followed medical treatment for some time under direction from the Mayo Clinic. Later, he returned to his local doctor, who took care of him until the time he entered St. Agnes Hospital at Fond du Lac. He was then very anaemic, had lost considerable weight and there was a large amount of blood in his stool. His red blood count was 2,160,000, white count 8,600 hemoglobin 35%. A blood transfusion was done on him the next day after he entered the hospital. This did not seem to have any influence on the hemorrhage, as the stool continued to remain black. Another transfusion was done in a few days and on June 19, 1931, an exploration of the stomach was done and a very hard, indurated mass was found at the location of the gastroenterostomy. After releasing many adhesions, which were the result of his previous operations, his gastroenterostomy was separated and an ulcer was found extending all the way around the jejunum. This was resected and an end to end anastomosis was made. A wide resection of the stomach was then done and another loop of small intestine brought up and attached to the end of the stomach. This man made a good recovery following this operation. He has regained his normal weight and is now in good health, with no evidence of any stomach complaint whatsoever.

The Sedimentation Rate in General Practice

By JOHN A. SCHINDLER, M. D., and W. B. GNAGI, JR., M. D.
Monroe

OF 1,773 general clinic patients studied by Yates,[1] 1,620 showed a definite correlation between the pathological diagnosis and the sedimentation rate of the erythrocytes. The test thus had an approximate accuracy of about 91.4 per cent, or of the same order of accuracy as the Wassermann and Kahn tests in syphilis, and of a higher order of accuracy than most laboratory tests. Since the test is so simple and easily performed it places in the hands of the general practitioner a valuable laboratory aid. Every practitioner can perform the test without additional laboratory facilities.

The sedimentation test is of value in

(1) Differentiating between inflammatory and non-inflammatory processes
viz: a. in the chest.
b. in arthritis
c. in the genitourinary system.

(2) Indicating the course and value of treatment in chronic infectious processes.
viz: a. in tuberculosis
b. in peptic ulcer
c. in rheumatic arthritis

(3) Differentiating between benign and malignant lesions.

(4) Indicating pregnancy in the absence of infection or malignancy.

Though the test is empirical in origin, as was the Wassermann, there is a growing general agreement among many observers, (Fahraeus, Starlinger, Westergren, Gram, Rourke and Plass, Rourke and Ernstene, Bendien and Snapper, Ohno, and Rieman)[2] that an increase in sedimentation rate is chiefly due to an increase in the fibrinogen or globulin of the blood. The sedimentation rate is increased when the viscosity of the plasma is raised by increase in the fibrinogen or globulin, or when the number of erythrocytes is reduced. The rate is decreased when the plasma is diluted or when the red cells are increased in number. The ultimate cause of the increase or decrease of fibrinogen or globulin at present appears to be related to the disintegration of cellular elements brought about by infection, injection of foreign protein, by neoplasms, or in any tissue disintegrating disease.

There are two general methods of sedimentation test. The first is the Linzenmeier method in which the reading is the time required for a sedimentation of 18 m m. The

second is the Cutler method in which the reading is the distance sedimentation has progressed at the end of one hour. The Cutler is the preferable method, since the readings are easier to compare according to the distance factor than according to the time factor, furthermore much less of the observer's time is consumed if he makes a reading at the end of an hour than if he must be on the alert for his "n" point over a period of three hours. The Cutler method is most generally used in the United States. Taking readings every 15 minutes adds nothing to the Cutler technique.

TECHNIQUE

We use the Walton[3] modification of the Cutler method as the most accurate method now available. The factors which must be controlled if results are to be standard are:

(1) The size of the tube: we have found most constant results with a tube 30 cm. long, 4 mm. in internal diameter, and graduated at 20 cm.

(2) The tube must be placed in an absolutely vertical position.

(3) Exactly 0.5 cc. of 3.7% sodium citrate should be added to 4.5 cc. of blood.

(4) The temperature of the room should be between 19°—23° C.

(5) The blood sample must be so adjusted that the erythrocyte count of the sample is between 4,500,000 and 5,000,000 per c. mm.

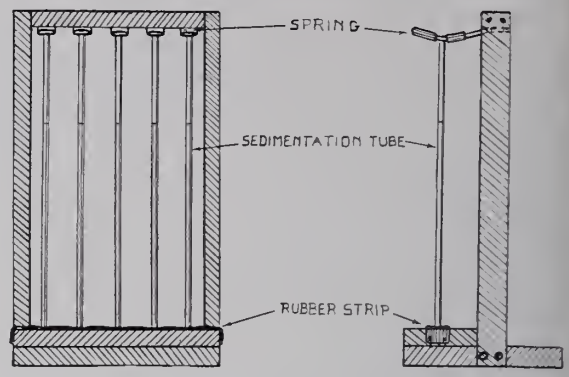
The procedure is as follows:

(1) Exactly 0.5 cc. of a sterile 3.7% solution of sodium citrate is drawn into a clean sterile 5.0 cc. syringe.

(2) The syringe is then filled to the 5.0 cc. mark with venous blood from the cubital vein.

(3) The syringe is then emptied into a small, clean, dry vial, and the blood gently mixed with the citrate by inverting a few times.

(4) If the patient's erythrocyte count is between 4,500,000 and 5,000,000 no correction need be made. The blood is drawn from the vial to the 20 cm. mark on the sedimentation tube and the tube placed in the sedimentation rack. A sedimentation rack can easily be made as in the diagram.



A flexible and strong piece of steel spring presses the tip of the sedimentation tube firmly into a soft rubber pad made from an inner tube. The tube can be quickly inserted, and the soft rubber base effectively seals the tip.

If the patients' erythrocyte count is above 5,000,000 or below 4,500,000, the sample must be corrected. If the count is above 5,000,000 plasma must be added; if the count is low, plasma must be removed. The amount to be added or removed can be determined by the formula

$\frac{X}{Y} - 1 =$ amount of plasma to be added to (or removed from) one cc. of blood.

$X =$ number of million cells per cubic mm.

$Y =$ desired number of million cells per cubic mm.

Thus if a patient has an erythrocyte count of 4,000,000 the calculation would be

$$\frac{4.0}{5.0} - 1 = -0.2 \text{ cc.}$$

or 0.2 cc. of plasma per 1.0 cc. of blood would be removed after centrifuging down the cells. If a count should be 5,400,000 the calculation would be

$$\frac{5.4}{5.0} - 1 = +0.08 \text{ cc.}$$

or 0.08 cc. of plasma would be added to each cc. of blood. The plasma is obtained by centrifuging about one cc. of blood and pipetting off the required amount of plasma.

(5) At the end of one hour the amount of sedimentation is measured from the bottom

of the meniscus of the supernatant plasma to the top of the red cell column. This reading constitutes the sedimentation rate.

For the few patients in whom venipuncture is undesirable the method of Steiger[4] which utilizes blood from a prick in the finger or ear is useful. Citrate is drawn to the mark 0.5 of a leukocyte pipette and blown out. Blood from a finger prick is drawn to the mark 1, then blown out and stirred in the citrate drop, and the mixture drawn to mark 1. The pipette is then placed in a vertical position in the same way as described above. This method does not compare with the above in accuracy, but is useful in gross determinations.

A normal sedimentation rate is never above 8 mm. During menstruation women may have a S.R. of 8–12 mm. During pregnancy the S.R. may go to 14 mm. In the absence of menstruation or pregnancy a rate of over 8 mm. indicates pathology.

Illustrative rates in various cases are given in the following table.

Sex	*Diagnosis*	*S.R.*
M	Normal	6.0
M	Normal	3.0
M	Normal	7.0
F	Normal	5.0
F	Normal	8.0
F	Normal	3.0
F	Psychoneurosis	3.0
F	Psychoneurosis	4.0
F	Uterine fibroid	7.0
F	Pregnancy 2 mos.	9.0
F	Pregnancy 6 mos.	12.0
F	Chronic pyosalpinx	2.00
F	Asthma	1.0
M	Asthma	1.0
M	Subacute nephritis	26.0
M	C.A. of prostate with uremia	84.0
F	Chronic proliferative t.b.	14.0
M	C.A. esophagus	18.0
F	C.A. of stomach	22.0
F	Chronic proliferative t.b.	18.0
M	Acute sinusitis with osteomyelitis	52.0
F	Subacute rheumatic fever	42.0
F	Acute atrophic arthritis	38.0
M	Convalescent rheumatic fever	14.0
M	Metastasizing teratoma	38.0
F	Acute exudative pulmonary t.b.	40.0
F	Ectopic pregnancy	9.0
M	Duodenal ulcer	20.0
F	Pulmonary tuberculosis, exudative with amyloidosis	120.0
F	Pulmonary and cecal tuberculosis	50.0

APPLICATION

Tuberculosis: Studies made by Harvey and Reid[5] and others give evidence that the sedimentation rate is of definite diagnostic value in indicating the presence or absence of active tuberculosis. Furthermore the test offers one of the most valuable measures of gauging the activity of the disease, especially in artificial pneumothorax therapy. Two examples of its use in diagnosis are the following:

Case 1. A woman age 56, well nourished and active, was troubled with a continual cough. One month before she had been thought to have had pneumonia, since which time she felt weak. Physical signs were not definite. Her temperature was 99.4° in the evening. A roentgenogram was deferred because of expense. However, the sedimentation rate was 22 mm. An x-ray was strongly advised. A considerable area of active exudative tuberculosis was found. In this case the Schilling count also indicated active tuberculosis : W. B. C., 16,000. B. 0., E. 2, Myel. 0, Meta. 1, Stab. 18, Polys. 14, Lymphocytes 9; Monocytes 14.

Case 2. A woman age 56, had been well until April 1934, when she was ill with pneumonia without much temperature. After recovery she had a continual cough, and increasing difficulty in breathing. No night sweats, fatigue, nor loss of weight. In August, 1934, she had another attack of what was supposed to be pneumonia, much like the first form from which she recovered with cough and dyspnea as before. Examination revealed a few bubbling rales in the upper right lung. The sedimentation rate was 2 mm. This, together with a hemogram containing 10% eosinophiles, convinced us that we were dealing with bronchial allergy. Nevertheless, a chest plate was taken which was negative for pulmonary tuberculosis. Graduated tuberculin test with human tuberculin was also negative.

Taking a sedimentation rate at monthly intervals in tuberculosis is our best method of estimating the activity of the disease. Bier[6] in 202 cases determined the following significance of the reaction in different stages of the disease:

Rates below 8 mm. = Cured or inactive.

Rates from 8 to 15 mm. = Convalescing stage.

Rates from 15 to 40 mm. = Active lesions or severe chronic stage.

Rates from 40 to 100 mm. = Advancingly active, or of bone.

Rates above 100 mm. = Active lesions combined with nephrosis or amyloidosis.

In children with frequent upper respiratory infections the sedimentation rate is a valuable diagnostic measure. In the absence of other infections an increased rate indi-

cates tuberculous activity, and this is strengthened by a positive human tuberculin test in high dilutions.

Arthritis: In arthritis it is frequently difficult to make a differential diagnosis between the infectious (atrophic, rheumatic, and rheumatoid) type, and the non-infectious (hypertrophic, degenerative, osteo-arthritis). The sedimentation rate is definitely of value, the rate being increased in the former and normal in the latter.

Case 3. A man aged 53 complained of increasing pain and stiffness of the knees, elbows and shoulders over a period of two months. He thought the joints were occasionally swollen, although they were never so when we observed him. There were several crowned teeth. The sedimentation rate and filament count were normal. Roentgenograms showed a hypertrophic osteo-arthritis. X-rays of the teeth showed no foci of infection. It was deemed useless to remove the crowns.

Case 4. A woman aged 37, complained of feeling tired, and of occasional swelling of the ankles for the past month. Her temperature went to 99.6°F. at times. Sedimentation rate was 42 mm. A few weeks later she developed 8 to 10 subcutaneous rheumatic nodules over both tibia. With complete rest and Small's serum the arthritis disappeared and the sedimentation rate gradually came down to normal.

It is our practice in rheumatic arthritis, particularly in children, to insist on absolute bed rest until the sedimentation rate returns to normal. This may sometimes mean six to eight months.

Pelvic Disease: One of the greatest fields of usefulness for the sedimentation rate is in pelvic disease. An increase in the sedimentation rate over 15 mm. with pain in the adnexal regions means pelvic inflammatory disease. Pelvic malignancy also increases the S. R. In early pregnancy the sedimentation rate rises to 8–10 mm. and in the latter part of pregnancy may be 12-14 mm. A. S. R. of pregnancy over 15 mm. means complication. During a menstrual period the S. R. rises to 10–12 mm.

Case 5. Woman, age 20, had missed one menstrual period and began to complain of severe cramping pains in the left lower quadrant, so severe as to be almost unbearable. A mass was palpable in the left adnexa. The temperature did not go above 100°F. The white count was 11,000. The sedimentation rate was 24, so that pelvic inflammatory disease rather than ectopic pregnancy was practically certain. With conservative treatment she made an uneventful recovery.

Case 6. Woman, age 22, had complained of frequent right lower quadrant pain, especially before menstrual time. There was a mass in the right adnexal region. The sedimentation rate was 7. At operation an ovarian cyst was found.

Case 7. Woman, aged 58, had a hard large lower abdominal mass which was fixed and immovable and appeared to be part of the uterus. The sedimentation rate being 6 mm., a malignancy was extremely unlikely. At operation a uterine myoma was removed.

In sudden explosive inflammations such as appendicitis the S. R. does not increase appreciably within twenty-four hours. Grodinsky[7] uses this fact in differentiating between acute appendicitis and right adnexal inflammation. In adnexal and urinary tract infections the sedimentation rate is already markedly increased by the time symptoms occur. In appendicitis within 48 hours the increase in sedimentation is not marked.

Diseases of the Digestive Tract: The greatest value of the sedimentation rate in gastro-intestinal diseases lies in distinguishing organic from functional disease. Especially at the present time it is out of the question to give a gastro-intestinal x-ray series to all individuals with symptoms which more or less vaguely suggest cancer. The vast majority of individuals presenting themselves with gastric or intestinal distress are functional cases. In cancer of the stomach the sedimentation rate is increased by the time the patient comes to the doctor. If an individual in any age group comes to us with a gastro-intestinal disturbance and we find a normal sedimentation rate we do not worry about malignancy. The test is repeated at intervals. If, however, the sedimentation rate is elevated we advise thorough x-ray examination of the entire G. I. tract.

D'Amato[8] performed sedimentation rates in 544 patients with gastro-intestinal complaints and found the test to be of distinct value in diagnosis and prognosis.

Case 8. A woman, aged 56, had floated from doctor to doctor with complaints of mild abdominal distress after eating, and occasional nausea. She was of a very nervous type, and diagnoses had repeatedly been functional gastric neurosis. A sedimentation rate of 20 mm. at the first visit indicated organic

trouble and x-ray examination was strongly advised. The roentgen examination showed a considerable filling defect due to carcinoma on the greater curvature near the pylorus.

Case 9. A woman, age 46, complained of vomiting beginning a month before and becoming so severe that she could retain no food. She had lost 20 pounds in weight. There was tenderness in her epigastrium. Physical examination revealed nothing further. The sedimentation rate was normal on repeated tests. G. I. series revealed no pathology. On theelin and calcium therapy she improved immediately and has remained well and without gastric symptoms for the past year.

Lorie[9] found the test very reliable in gastric diagnosis. He found a normal rate in simple ulcer, but increasing in proportion to the activity of the ulcer. In several cases where an ulcer went on to perforation in spite of symptomatic cure the sedimentation rate remained elevated. He concludes that the test is the best indicator at our disposal of ulcer activity.

Psychoneurosis: The sedimentation rate is of inestimable value in the cases presenting bizarre and sometimes alarming symptoms but in whom no organic lesion can be found. In such cases a repeatedly normal sedimentation rate practically precludes organic disease. Range[10] in 157 cases of functional neurosis and psychopathies found a normal or retarded S. R. In our practice no patient is labeled with "functional neurosis" unless the sedimentation rate is normal. Apparent neurotics with increased rate almost invariably show definite evidence sooner or later of organic disease.

Case 10. Woman, age 26, unmarried, complained of severe headaches, nausea, anorexia, and fatigue. After a few weeks she developed diplopia, numbness and tremor of the right arm, and a month later developed vertigo to such an extent that she could not walk. She lost 30 pounds in weight. The temperature remained normal, neurological including Bárány's tests remained normal. Lumbar punctures showed no abnormality. The sedimentation rate and Schilling differential remained normal. After a year her condition began to improve until she was free of all her earlier complaints.

Allergy: In asthma, hay fever and urticaria the sedimentation rate is retarded.

Febrile Diseases: Heckscher[11] examined the blood sedimentation rate in about 700 patients with catarrhal fever and various other acute febrile diseases. The rise, climax and fall of the sedimentation values appeared some days later than the fever curve and returned to normal two weeks after the end of the fever. It is, therefore, not of great value in the acute febrile diseases.

There is one acute febrile disease in which the sedimentation rate has distinct diagnostic value, and that is pertussis. Denes and Latos[12] have found the rate to be normal or decreased in pertussis. According to them a diagnosis of pertussis can be made in any infant with a cough, if the lymphocyte count is over 10,000 and the sedimentation rate is normal or subnormal.

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RADIATION IN TUBERCULOSIS

John S. Coulter and Howard A. Carter, Chicago (Journal A. M. A., July 20, 1935), found that ultraviolet radiation of varied intensity in doses sufficient to produce a mild erythema and subsequent pigmentation produced no beneficial effects in cases of active pulmonary tuberculosis or in cases following thoracoplasty. In cases of thoracoplasty with delayed wound healing, local ultraviolet irradiation with a carbon arc lamp increased the growth of healthy granulation tissue and the tendency to epithelization. Near a large city the changing atmospheric conditions introduce obstacles that make the selection of the dosage factors impossible in heliotherapy. The generally listed dangers following ultraviolet irradiation in cases of pulmonary tuberculosis have been exaggerated, provided the dosage of ultraviolet radiation is carefully regulated. In a number of cases there was no suggestion that ultraviolet irradiation had any uniform effect on the red blood cell count, the hemoglobin value or the white blood cell picture.

Diseases of the Cervix Uteri*

By CARL HENRY DAVIS, M. D.
Milwaukee

THE medical profession as a whole has been slow in recognizing the importance of the various diseased conditions of the cervix uteri. Naturally, gynecologists, whose specialty causes them to make a thorough examination of the pelvic organs, have been accustomed to inspect the cervix uteri as a part of a routine examination and to study smears and biopsies when indicated, but most internists and even capable general surgeons who perform many gynecological operations neglect pelvic examinations. This oversight accounts in part for many failures to diagnose cancer of the cervix in an early stage when it is curable.

It is evident that a rather large percentage of women at some time in their lives have lesions of the cervix or vagina which may cause symptoms of which leukorrhea is the most common. This symptom is so common that many physicians in the past have accepted it as a normal condition without making an attempt to determine its cause. Realization that there is no excess of secretion from the normal pelvic organs has led gynecologists to make an intensive study of the cervix and vagina with the examination of fresh wet smears as well as stained. Frequently cultures have been made in an effort to determine more accurately the nature of the infection which may be present. Studies of this type have greatly increased our knowledge regarding the causes of abnormal discharges with resulting improvement in methods of treatment. It is now realized that the discharge from the cervix uteri is usually thick, tenacious and nonirritating, whereas the discharge from the vaginal wall is apt to be thin and more irritating to the external genitalia. Formerly it was accepted that bacteria were responsible for the irritation which resulted in an abnormal discharge. More recently the importance of Trichomonas vaginalis and various forms of yeast have been recognized. Many women and girls in past years have been suspected of having a venereal infection when they really had the Trichomonas or yeast. Luetic lesions of the genital tract are rarely seen, probably because they cause few symptoms, yet it is certain that the majority of such infections must have been primary on the vulva, cervix or vagina. Many physicians have contracted syphilis from pelvic examinations made without the precaution of wearing rubber gloves. Finger cots are better than the use of bare fingers but it is much safer to wear rubber gloves for all vaginal examinations.

Every statistical follow-up study of cervical lesions treated by surgery, cautery or surgical diathermy, even granting some degree of error, indicates that cervical cancer rarely develops in women who have had adequate treatment of cervical lesions. Clinicians are agreed that: (1) Cancer does not develop in perfectly normal tissue. (2) Various forms of chronic irritation constitute predisposing factors which favor the development of cancer. (3) Every cancer in its earliest stage is a localized microscopic disease. (4) Most cancers can be cured if diagnosed early and adequately treated.

Notwithstanding the campaigns of education carried out by various organizations during the past decade or two it is unfortunately true that most cancers are not diagnosed by a physician until the patient has the symptoms of a late lesion. For this reason only a small percentage of permanent cures is obtained even though most early cancers are curable. We assure the laity that if everyone would have adequate physical examinations regularly, cancerous lesions on the superficial portions of the body where inspection is possible could be recognized in an early stage of malignancy. It is certainly true that the number of cures could be greatly increased if we had the early diagnosis, but is the average

* Presented before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, September 1934.

physician conscious of his responsibility for making the type of examination which will make possible an early diagnosis? Is there not good reason for extensive education of the profession as well as the general public?

It has already been stated that early cancerous lesions do not cause symptoms. Is this fact appreciated by the average physician? Early diagnosis is essential to cure, yet with our usual methods of examination it is doubtful if a carcinoma of the cervix could be recognized unless it has reached the size of a pea. If overlooked during an examination the early lesion would progress gradually and might be well advanced by the time the woman had another careful examination. Recognition of this fact led Hinselmann to develop his colposcope by means of which a small carcinomatous ulcer, too small to be seen with the unaided eye, is enlarged to a size which makes recognition possible. The use of this instrument combined with the Schiller test should enable earlier diagnosis of cervical carcinoma than was formerly possible in the examining room.

It is highly probable that each of us who has used the nasal type cautery or surgical diathermy for some years has destroyed a few microscopic cancers, thereby curing the patients just as effectively as if they had had a radical treatment with surgery or radiation. One of Hinselmann's patients who had a microscopic carcinoma has remained well for nearly three years since he amputated the cervix. I examined this woman in July, 1934, and found on bimanual examination that she had perfectly normal pelvic organs. The colposcope showed that she had a normal healthy appearing cervical mucous membrane. Although she is a young married woman who is anxious to have children, she has agreed to have a hysterectomy if Hinselmann ever finds any further evidence of pathology when she reports for her regular examination which is made every three months.

DIAGNOSIS

Diagnosis with the colposcope, like other methods, requires considerable experience. First one must obtain an accurate knowledge of the varied but essentially normal physiologic structure of the cervix uteri. Later the variations from the normal may be recognized and diagnosed quite accurately. Hinselmann is convinced that with the colposcope it should be possible to recognize an exophytic carcinomatous ulcer even if only one papilla should be involved, but such a finding would be exceedingly rare since more than one usually is involved. An endophytic carcinoma is recognized with greater difficulty since the growth is inward and the diagnosis must depend on the size of the overlying ulcer and the type of secretion. Hinselmann has found that the larger ulcers have a very characteristic appearance showing areas of necrosis, yellowish nests of cancer cells and blood vessels running longitudinally, but it is not always possible even with the colposcope to differentiate correctly a true erosion from a carcinomatous ulcer. It must also be appreciated that some endophytic carcinomas are partially covered with the abnormal epithelium from which the growth originated and that they may not appear as ulcers. Hinselmann calls this epithelium the matrix of the carcinoma. The matrix of an endophytic carcinoma also may hornify and be recognized as a leukoplakia. With the usual type of inspection it is impossible to differentiate the carcinoid epithelium from the surrounding epithelium but with the colposcope the diseased area stands out and should be easily recognized.

Several practical problems of great importance should be noted when one considers a study of the colposcopic picture of leukoplakias. (1) It is not possible to correlate the colposcopic picture with the microscopic appearance except in Hinselmann's Grade IVa. (2) Definitely malignant leukoplakias may have the same colposcopic appearance as those which are miscroscopically benign. (3) Biopsy material from a cervix with many areas of leukoplakia may not permit a definite diagnosis since the excised area and the rest of the cervix may have a very different histologic structure. (4) The gynecologist always should attempt to diagnose matrix areas since their removal by amputation of the cervix or their destruction with the nasal type cautery or surgical diathermy may cure

an early microscopic carcinoma. (5) Early diagnosis of cervical lesions, preferably with the colposcope, and eradication of diseased areas is the only method available for the prophylaxis of carcinoma of the lower genital tract in women.

Hinselmann is undoubtedly correct in maintaining that one may rely on the microscopic diagnosis only after a study of serial sections of an entire leukoplakia or the entire cervix. Unless one has studied serial sections of a large number of cervices removed by amputation or hysterectomy it is not probable that some of the changes described by Hinselmann and Schiller will have been observed. Obviously studies by means of serial sections are too costly for routine use, but lessons learned from such studies show that we should not be content with our former dependence on one or two sections for it is evident that a malignancy may easily be overlooked. Furthermore, pathological reports should state merely that there was no evidence of malignancy in the sections studied. Women with diseased conditions of the cervix must be made to appreciate the necessity for regular colposcopic examinations with further biopsy studies if indicated. The use of the Schiller iodine test with the colposcope makes possible a more adequate securing of biopsy material.

Is leukoplakia a precancerous lesion? This question is being debated at the present time. Many German writers do not believe that it is. Stoeckel states that he has followed leukoplakias for as long as three years without seeing evidence of malignant changes. However, Hinselmann has one patient whom he first saw with a small area of leukoplakia on the anterior lip of the cervix in 1926. Year by year there was more evidence of hornification when she returned for her regular examinations and after six years she returned with a carcinoma of the cervix. Furthermore, areas of leukoplakia are commonly found at the edges of well developed cancers, and for the present it must be considered that Hinselmann may be correct in his assumption that all leukoplakias should be considered precancerous in their nature. This does not imply that every woman who has a leukoplakia will eventually have a cancer, but rather that she is more apt to develop a carcinoma than the woman who does not have leukoplakias.

A matrix area having been diagnosed, what type of treatment should be selected? This is a practical problem of great importance and various gynecologists have feared that a more general use of the colposcope might lead to a considerable amount of unnecessary radical surgery. Since returning from Germany I have examined a considerable number of cervices which had been treated with the nasal type cautery or surgical diathermy during the past ten years. The results observed have been very satisfactory, the colposcopic appearance being quite normal in most cases. Therefore, I feel justified in continuing to treat in the office with the nasal type cautery or surgical diathermy, minor cervical lacerations, eversions, erosions or polypi. It would seem that primary surgical removal of the cervix by amputation or total hysterectomy should be reserved for older women and those who have other indications for surgery.

Antivirus Treatment of Ulcerative Colitis*

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West Allis

THE TERM antivirus has been coined by Besredka. He meant, by this, substances specifically acting upon the sensitive body cells, called by him "cellules receptives". Such cells would be e. g., the intestinal epithelium for the dysentery bacillus, the skin epithelium for the staphylococcus, etc. Besredka thinks that by coming in contact with

* From the Pathological Laboratory of the Milwaukee Hospital.

the antivirus these cells become refractory against the organism and no further infection can take place.

Antivirus is prepared in the following way: One takes a large flask filled with plain broth, plants it with the bacterium of which one wants the antivirus and leaves it for eight days in the incubator at 37 degrees C. After this time one filters the culture through a Berkefield filter. Besredka recommends now to plant this filtrate again with the same bacterium, to incubate it for eight days more and then to use it. In my experimental work as well as in my work with Doctor Johnson, I found that this second planting and second filtration is unnecessary. We now take the first filtrate and heat it to 100 degrees C. for five minutes. We found this filtrate to contain the desired antivirus and to be suitable for clinical use.

Besredka thought he was able to demonstrate the action of antivirus in vitro. He saw that when he planted the filtrate a second time the growth was rather scanty. From this he concluded that some substances in the filtrate prevented the growth of the specific bacteria and called the filtrate after second filtration antivirus. This phenomenon has been much studied by other scientists and most of them think exhaustion of the medium and chemical changes in it account for the scanty growth in the filtrate.

It was possible for me to prove definitely that the reduced growth in the filtrates was neither due to exhaustion of the medium nor to its acidity**. If one dilutes the filtrate with physiological salt solution one should expect that one obtains less growth in the diluted medium. Just the opposite occurs. One obtains a rich growth in a dilution of the filtrate 1:5, while the undiluted filtrate planted with the same amount of culture remains entirely clear.

In order to prove that the acid reaction is not the cause of the reduction of the growth in the filtrate I again diluted my filtrates with a physiological salt solution which had exactly the same pH as the filtrate. I obtained a rich growth in the diluted filtrate, no growth in the undiluted.

** The detailed results of these experiments and of those in animals will be given in another paper.

Nevertheless if one makes the filtrate alkaline one always obtains a rich growth. This proves that there must be some substances in the filtrate which check the growth only in acid reaction.

When I first tried to study the immunizing power of antivirus in the animal I met with considerable difficulty using streptococci and staphylococci. It is a matter of fact that rabbits and guinea pigs are not very sensitive to these germs so that it is hard to find a staphylococcus strain that will kill the control animal in a dose of 1-3 cc. The streptococci, on the other hand, lose their virulence rapidly. Therefore, I wanted to make my experiments with a bacterium which is very pathogenic for rabbits and guinea pigs and keeps its virulence for years. I found such a germ in the bacillus pyocyaneus, which also has the advantage of being almost apathogenic for man and therefore practically without danger for experimental work.

I first tried Besredka's immunizing dressings. Gauze was soaked in filtrate, in which pyocyaneus had been cultured and then a wet dressing applied to the animals for 24 hours. This was repeated several times in each animal. It was a complete failure. Subcutaneous and intracutaneous injections were tried with the same negative result.

It was not possible to immunize animals against cutaneous or subcutaneous infection or to cure already infected animals in this way. There was no success until I tried the intrapleural route of administration. First I injected 3 to 5 cc. antivirus several times in intervals of three or four days and then I injected the treated animals together with control animals with the culture of living pyocyaneus bacilli.

The animals previously treated with antivirus survived a multiple fatal dose of pyocyaneus culture. Killed after one or two weeks, they showed either no lesions at all or a localized abscess in the place of injection. Heart blood culture was sterile. As controls, animals were used which had been given exactly the same amount of plain broth instead of the antivirus and animals which had not been treated previously at all. All of these animals succumbed within 24 hours and showed severe pleurisy and pneumonia with

a large amount of exudate. There was no difference between the animals previously treated with plain broth and the untreated ones. I want to stress this result, because several authors in Germany tried to classify the action of the antivirus as a foreign protein reaction. I am sure that it is *not* and I believe that there are specifically acting substances in the filtrate.

But another question of specificity now arises. For example, when I treat an animal with antivirus prepared with bacillus pyocyaneus, does the animal become immunized only against the specific germ (pyocyaneus) or does it give to the animal an increased resistance against any kind of infection?

The results of my experiments indicate that a definite immunization is obtained only against the specific bacterium. If one immunizes a set of animals with pyocyaneus antivirus and uses the bacterium coli for infection, the animals die as frequently as the controls. In some cases, however, a slight increase of resistance seemed to have been developed so that the animals died later than the controls. In no instance, however, was the immunization as definite and constant as the immunization with the specific anitivirus against the specific bacterium.

IMMUNITY LOCAL OR GENERAL

Besredka maintains that all the immunity caused by antivirus is strictly local and not general. According to Besredka, the action of the antivirus is limited to the cells with which the antivirus directly comes in contact. These cells are supposed to absorb the antivirus and become refractory to the virus to such a degree that no further infection can take place.

I disagree with Besredka on this point. My last experimental results point in an entirely different direction. I have been able to produce agglutinins against pyocyaneus when I injected antivirus in any way—intrapleurally, subcutaneously, intravenously or intramuscularly. In every case I tested my antivirus for sterility and examined my animals for pre-existing agglutinins. They never showed a higher titer than 1:20. After several injections of antivirus, however, I obtained titers between 1:100 and 1:6400. The average was about 1:800. The serum became positive about ten days after injection —1:100 or 1:200—and showed a progressive increase until the end of the third or fourth week. Then the titer fell rather rapidly, occasionally as low as 1:50. This production of agglutinins I regard as a definite proof of the generalized action of the filtrates.

The next point of interest was to determine the relation, if any, between the formation of agglutinins and the immunity which had been demonstrated in the experimental animals. It was tested by intrapleural injection of living pyocyaneus bacilli. It was self-understood that animals which had been immunized with antivirus intrapleurally were immune against the infection, but it was interesting that subcutaneous, intraperitoneal and intravenous immunization could also prevent an intrapleural infection, while the controls died of a severe pleurisy within 24 hours. The immunized animals were killed after one or two weeks and showed either no lesions at all or a local abscess in the place of injection. I think these results speak definitely for a generalized immunity and against a local immunity alone.

It is difficult to say anything about the nature of the so-called antivirus. It cannot be an antibody because it is not formed in the animal body. It has nothing to do with Herelle's bacteriophage, which is thermolabile, while an antivirus can stand a temperature of 100 degrees C. for half an hour. I can only consider the antivirus as a solution of filtrable bacterial proteins which cause the above mentioned reactions in the body. Much work is still necessary to explain all these phenomena.

But there is no reason why we should not use these substances, even if we do not understand the manner in which they act. If you glance through the book of Besredka, you will find that antivirus has been applied in every region of the body and used in every field of medicine. I will not take up your time by giving you a detailed report, but I wish to mention a few examples in order that you may see how many possibilities there are for clinical application.

Antivirus has been much used in stomatitis and alveolar pyorrhea. After tooth extrac-

tion the wound heals more swiftly if it is rinsed with a mouth streptococcus antivirus.

In otitis media Wonsowsky reports very good results by rinsing the meatus with antivirus and dressing the wound. In many cases he claims that no radical operation was necessary. He recommends highly dressing of the wounds of operated cases with gauze soaked in antivirus.

In chronic rhinitis and sinusitis many successful cures by intranasal application of the antivirus are reported.

Empyemas have frequently been treated by instillation of the specific antivirus into the wound.

The most frequent application of the antivirus has been in furuncles and abscesses of the skin. It has been either in the form of wet dressings with antivirus or irrigation of the wound with it. Dressings have also been used in erysipelas.

In 1932 I could report a case of malignant edema together with Doctor Merten. An antivirus against the bacillus of malignant edema was prepared and applied in the form of wet dressings. The surgeon is of the opinion that the antivirus was the factor which saved the hand of the patient.

In urology, especially in cystitis, antivirus has been much used. Success and failures have been reported. Recently antivirus is said to have been used successfully in gonorrheal infections by the subcutaneous route.

Sorgo has used sprays with tubercular antivirus in tuberculosis of the larynx. He could relieve his patients from pain and from dysphagia so that they could eat again.

If we now turn to the gastro-intestinal tract we find since the war a tendency to give vaccines by mouth. I cannot go into details, but I will mention to you that vaccines have been given by mouth in dysentery and cholera with very satisfactory results. In animals ingestion of killed dysentery cultures confers a solid immunity. If, however, one lets them swallow typhoid bacilli or cholera vibrions, they pass the intestinal tract without any reaction. But, if one gives ox bile previously, the vaccination results are just as good as in dysentery.

Recently Luxembourg used intravenous injections of typhoid antivirus in typhoid fever, 5 cc. in the adult and 1.5 to 2 cc. in the child. Two to six injections were given. There was a marked reaction in the form of a rise of temperature, rapid pulse and cyanosis but the symptoms did not persist longer than half an hour. A second injection given after 24 hours caused the same reaction but immediately afterwards the headache disappeared, the tongue became clean and the stools became normal. At last also the spleen decreased in size. The author reports that he has not seen complications in cases treated in this way. He also states that these patients never became carriers.

Treatment should be started as soon as possible. In very severe cases with extended suppurations intravenous injections of antivirus are contraindicated.

In 1931 Friedrich in Germany reported good results obtained in ulcerative colitis with antivirus prepared from staphylococcus, streptococcus, and bacterium coli. I had started in 1929 to prepare filtrates for the treatment of ulcerative colitis. For this purpose I took stool specimens and isolated the germs found, especially bacterium coli and enterococcus. With them I made broth cultures, cultivating them separately, filtered and heated them as above described. They were applied locally *per rectum*. In some cases it seemed to be necessary to start the treatment *immediately* and not to wait until the cultures were isolated and the antivirus prepared. A stock antivirus obtained from other patients was used with apparently good results. In general it seems evident that in very acute cases where one cannot wait for autogenous antivirus a stock antivirus may be used with benefit. For instance, in cases of diffuse peritonitis following appendicitis, Kittinger has had many good results after pouring 70 to 100 cc. of a mixture of staphylococcus, streptococcus, coli and proteus antivirus into the abdominal cavity.

TREATMENT OF ULCERATIVE COLITIS

By A. W. JOHNSON, M. D.

Ever since 1929 we have been using antivirus in the treatment of ulcerative colitis, and for the past 3-4 years have been using it routinely on account of the uniform successful results is gives us.

Until recent years we dreaded seeing these patients coming to the office as we were unable to promise much in the way of relief, and less for a cure, so we were naturally glad to try antivirus when Doctor Oesterlin urged its use.

Every physician sees these patients in his practice, male and female, ranging in age from 16 to 55, giving a history of passing blood and mucus two to twenty times a day, over a varying period of from weeks to years, colicky pains in the abdomen, loss of weight, even to real emaciation, weakness, lack of pep, etc. The bowel upon digital examination feels velvety and thickened. Through a proctoscope the bowel looks raw and oedematous with dark colored blood and mucus everywhere, and various grades of ulceration. The bowel bleeds even when touched with a cotton swab. One must always be careful to differentiate from carcinoma and papilloma. Once the diagnosis is made we immediately take smears from the bowel and send them to Doctor Oesterlin to have antivirus made. The organisms found so far in these smears are bacterium coli, enterococcus, streptococcus viridans, and once staphylococcus aureus. As it takes 8-9 days to make an antivirus we use a stock antivirus during that time, (antivirus from another patient). This does not seem to be quite as effective as that made from the individual patient.

The great majority of these cases can be treated ambulatory, but if a fulminating type is encountered with extreme emaciation and loss of blood and mucus, temperature, etc., it must be hospitalized. Then if the occasion arises where surgery is indicated, such as appendicostomy, caecostomy or colostomy, it can be done, and the antivirus placed in the colon from these points.

The ambulatory treatment is carried out much in the following manner: The patient is given a warm boric enema to cleanse the bowel, and then about 15 or 20 cc. of antivirus is placed in the rectum through a rectal tube or proctoscope daily. The amount is increased as the patient will tolerate it. The patient is kept lying down with the hips elevated, and turned slowly from side to side, and urged to retain the antivirus as long as possible. At first it may only be retained 10-15 minutes, but in a week or so it usually can be retained several hours. We find the bleeding gradually stops in from 6-15 days, the number of stools decrease, and the patient starts to improve in health generally, and usually within a month is having from 1-3 stools daily. The bowels return to near normal in appearance with very little scarring. A moderate hyperemia persists for some time. Along with this the patient is placed on a bland but nutritious diet, regular meals. He must quit work and get plenty of rest, avoid all worries and excitement, take no alcoholics or carbonated beverages.

Foci of infection must be diligently looked for and eradicated, and usually one or more will be found. If a later recurrence of blood and mucus in the stool should occur, I believe it is a safe assumption that all foci have not been removed and further treatment with antivirus will be necessary.

We have treated 15 cases with antivirus, two hospitalized, the rest ambulatory. One died in the hospital from general peritonitis shortly after entering. Antivirus could only be used a few days, and the patient could not overcome the severe toxemia. The rest of the series made complete recovery and to our knowledge are still well.

I will briefly report a typical case treated ambulatory, as they all run similar courses: Male, machinist, age 47 years. Examination September 2, 1933, showed history of blood and mucus in the stool for two or three months. There were 15-20 stools daily, moderate loss of weight, appetite poor, pale, recently unable to work. Proctoscopic examination showed the bowel ulcerated and inflamed, profuse bleeding and mucus over the entire bowel as far as could be seen. Examination for amoeba was negative. Diagnosis: ulcerative colitis.

The teeth were x-rayed and six apical infections found, and these teeth were extracted as soon as possible.

Smears from the bowel showed only Gram negative bacilli, corresponding to bacterium coli. Antivirus was made. From 15 to 20 cc. of antivirus were instilled into the bowel daily, following a warm boric enema and retained as long as possible.

This patient was treated from September 5, to October 30, daily, then twice a week until November 4, when he was discharged as cured. Dietary and hygienic measures were carried out as suggested above.

It will be interesting to follow these cases over a period of five years or more, but to date the results are very encouraging and gratifying.

A CASE REPORT OF ULCERATIVE COLITIS

By J. L. KINSEY, M. D.

This patient, a young woman of 31, developed a severe attack of diarrhea on April 21, 1934, with sudden onset. There were 15-20 bowel movements per 24 hours.

On May first a stool examination was made. The findings were:

No amoeba.

All chemical tests for blood positive.

Smear: Masses of Gram negative bacilli with an occasional Gram positive diplococcus.

Culture: Broth-Pure enterococcus. All other cultures gave colon bacilli. No bacilli of the typhoid and dysentery group.

The treatment at this stage was entirely dietary.

The picture changed at the tenth day with acute pain in the right lower quadrant. The right rectus was rigid and the patient nauseated. A blood count showed 13,000 white blood cells and 4,500,000 red blood cells; hemoglobin 85%.

The attack of localized pain subsided in three to four days, but the diarrhea continued. At this time, May 14, another stool for examination was made which showed no amoeba, masses of pus cells, bacterium coli and enterococcus.

In view of this a diagnosis of ulcerative colitis was made and the patient hospitalized.

The findings on entrance, May 17th, were:

Physical examination: Negative, except as previously related, with some loss of weight and marked dehydration.

Blood count: Red blood count 4,180,000; hemoglobin 82%. White blood count 8,650. Neutrophiles 68% with a shift to the left of 31.5%. Eosinophiles 3.5%.

Blood sedimentation: Velocity 57.5.

Urinalysis: Negative.

X-ray: Chest negative.

The colon showed absence of haustrations in the descending colon.

Proctoscopic examination, May 19, showed: The bowel very irritable, the lower half filled with pus and blood. The mucous membrane was very moth eaten and fiery red in appearance. Much of the mucous membrane had sloughed. The proctoscope was not inserted more than 6 inches, due to the irritability of the bowel.

Treatment was started using 45 cc. of stock colon bacillus antivirus, instilled into the rectum after a plain water enema and retained as long as possible. This stock antivirus was used daily while the autogenous was being made. This constituted the treatment for the first ten days. The only additional treatment was two 1,000 cc. doses of 10% glucose intravenously, and barbiturates for sleep and restlessness, a non-residue diet and bed rest.

Fig. I. Taken May 17th when the patient entered the hospital. Complete absence of haustrations. Many ulcers.

It is interesting to note the progress of the patient in detail. On the fourth day after admittance, May 21, there were 17 movements per 24 hours. This number and the number for subsequent days includes one plain water enema and the expelling of the antivirus.

May 22	15 movements
May 23	20 movements
May 24	13 movements
May 25	14 movements
May 26	11 movements
May 27	11 movements

The general condition of the patient had improved gradually. The bowel was less irritable, as demonstrated by the increasing length in time in which the patient retained the antivirus and the decreased number of movements, per 24 hours. Another proctoscopic was done May 27. The bowel looked pale, the mucous membranes regenerating. Condition much improved.

The same treatment was continued and the progress noted.

May 28	13 movements
May 29	9 movements
May 30	8 movements

Fig. II. Taken May 27th. Decrease of the ulcers.

Fig. III. June 4th. No evidence of ulcers. Absence of haustrations in descending colon and in both flexures.

At this time the autogenous antivirus was completed and instead of 45 cc. of stock colon bacillus antivirus, 30 cc. of colon bacillus antivirus and 30 cc. of enterococcus antivirus (both autogenic) were used.

May 31	8 movements
June 1	6 movements
June 2	6 movements

The movements, while becoming less frequent, also became more formed in character, several semi-formed and soft formed stools being noted. The patient was markedly improved—appetite good, little or no pains preceding movements, and general appearance better.

After three weeks' hospitalization, the patient's condition was such that she was permitted to go home after a check-up of blood count and x-ray.

X-ray on June 4th showed absence of haustrations in descending colon and both flexures. There was no evidence of ulcers, which apparently had disappeared since last examination.

The patient left the hospital June 6th. The treatment was continued at home, still using 30 cc. of coli and 30 cc. of enterococcus antivirus. The number of movements during the first month varied from 3 to 10 per 24 hours and the antivirus was retained from 1½ to 6 hours. The movements were mostly unformed, but there were occasional soft formed movements.

The patient continued to improve. Many movements were solid and well formed. There was slight bleeding after some movements. A proctoscopic examination at this time showed the sigmoid and rectum entirely healed, although apparently pitted, except for one rather large ulcer posteriorly at the rectoanal juncture.

On August 6th the patient was rehospitalized and for four hemorrhoids were ligated and rectal ulcer was removed and packed. Recovery was uneventful and the patient returned home in a week. On September 9th, a devitalized tooth which showed some root absorption, was removed.

For two weeks preceding the hemorrhoidectomy, the patient was using the antivirus every third day. For three weeks after the operation none was used. There was one mild recurrence about two months ago, with 8-10 watery movements per 24 hours. This occurred after the tooth extraction, and during the period when the antivirus was exhausted. In ten days, when the antivirus had been prepared, the attack had subsided somewhat, but the treatment was started and given every day for two weeks.

At the present time the patient is much improved. She has an average of two movements daily, all formed, with no pain preceding or following the movement. She has regained all but about five pounds of the thirty that had been lost during the initial acute stage.

A proctoscopic examination on October 13th

showed a pale, healthy mucous membrane, normal in all respects.

The antivirus was discontinued in December, 1934, and has not been used to date. There was one slight attack of diarrhea in March, 1935, but this lasted only one day. A proctoscopic examination revealed no pathology, the mucosa being smooth and healthy in appearance. The patient's general physical condition is good, weight normal and her routine that of a young healthy person.

CASE OF PARATYPHOID INFECTION

By THOMAS WILLETT, M. D.

Miss R. D., 22 years old. I was first called February 20, 1934, with the following history:

In the summer of 1931 she was a student technician in a pathological laboratory. She first noticed a feeling of tiredness and listlessness, mild continuous headaches, afternoon fever and diarrhea. An arthritis that she had had years before in her hands returned and spread to her knees and ankles.

In 1932, in spite of treatment, her condition gradually grew worse. Bowel movements were from 6 to 10 daily, the arthritis increased, and the fever became a little higher and the weakness much more marked. In December, 1932, she noticed that each bowel movement was accompanied by blood.

In January, 1933, she was removed to a hospital where a tonsillectomy was done, her teeth examined and found good, and a number of hypodermic injections given that she thinks were foreign protein. She states that the injections made her quite sick.

On January 22, 1933, she returned home unimproved and slowly became worse.

In June, 1933, she returned to the hospital. By this time she was completely bed-ridden. At the hospital she was placed on a very strict diet for ulcerative colitis and over a hundred injections of Bargen's vaccine, she thinks, were given, but without avail. She returned home the second week in November. From this date she had no medical attendance until February 20, 1934.

February 20, 1934, I was called and found as follows:

Young woman age 22. Examination showed her to be anemic, greatly emaciated, skin harsh and dry, hair dry and matted. The conjunctivae were slightly icteric. The teeth were good, the throat normal, tonsils absent. The neck, shoulders, elbows, hips, knees and ankles were quite ankylosed. The hands were bent and deformed. There were several furuncles on the chest and abdomen and pus about the nails of the great toes. The chest and heart were apparently normal, the abdomen flat and somewhat rigid. She had not menstruated for two years. She was very hypersensitive to touch in every part of the body. Her general attitude was listless, indifferent and apathetic. She had about 12 to 16 bowel movements daily, liquid, mucus and blood, and occasionally an involuntary, although the movements were mostly accompanied by tenesmus.

It was impractical to move her to a hospital on account of the arthritis and the general hyperaesthesia. The stools were taken to Doctor Oesterlin and an atypical paratyphoid bacillus was found. From this organism he made an antivirus.

Fifteen cc. of antivirus were injected daily per rectum by a catheter passed up about 6 or 8 inches. The first day an attempt was made to wash out the bowel with normal salt solution prior to the injection, but the distress this caused made it impractical. The antivirus injections after the first day produced no discomfort or other untoward symptoms.

The antivirus was given daily for three weeks, then a week's rest, and a second course of daily injection was given.

Improvement was quite prompt. After about ten days the number of bowel movements became gradually reduced, her appetite improved and the arthritic swellings began to subside.

By August she seemed quite normal. The stools were 2 to 3 daily, formed and painless. As early as the middle of May the laboratory pronounced the stools negative for paratyphoid.

The arthritis has disappeared, but all the joints are still quite ankylosed. Massage and passive motion are used daily besides encouraging the patient to "help herself". Mentally she is happy, vivacious, but getting quite impatient with her progress.

SUMMARY

1. Antivirus is a strictly specific soluble substance found in 8-day broth culture filtrates.

2. By injection of antivirus into animals one can produce agglutinins in an average titer of 1:800 for the specific organism.

3. The action of the antivirus is general.

4. Antivirus is used in ulcerative colitis injecting it locally per rectum, but it acts throughout the whole colon.

5. Ffteen cases in which all treatment was without avail have been treated successfully with antivirus alone, by Dr. Johnson.

6. A typical case is extensively discussed by Doctor Kinsey.

7. The specificity is shown in a chronic infection of two years' standing with an atypical paratyphoid, observed by Doctor Willett.

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The Treatment of the Patient Who Has Heart Failure

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THE title of this paper is purposely worded because, while numerous articles have been written on the subject of The Treatment of Heart Failure, the emphasis has been invariably placed upon treatment of the heart rather than treatment of the patient who has heart failure. This is my apology for adding another article to the many which have been written.

I wish to lay down at once two propositions and then expand upon them. The first is, the treatment of heart disease is not so much the treatment of the heart as it is of the rest of the body, the person ill with heart disease. The second is that the treatment of heart disease should begin in childhood or whenever the young person has a serious illness. Volumes have been written upon how to treat the heart as an isolated organ; how various drugs act upon the isolated heart muscle either *in situ* or in a heart-lung preparation; how certain drugs affect the conducting system of the heart; how drugs act upon the vagus and sympathetic nerves which supply the heart; how drugs act upon the coronary vessels. The reader can find all the points just mentioned in the voluminous literature on the heart. I am assuming that he knows all these drug actions. However, I say boldly that, granting a knowledge of all these actions, he does not necessarily know how to treat heart disease. It is frankly admitted that in order to treat heart disease intelligently one must know the actions of the drugs upon the heart muscle and nerves but if that is all one knows he does not know really how to treat heart disease.

Doctors speak loosely of heart failure and appear to feel that when they have made that diagnosis the question is settled, the heart fails. Why the heart should fail is often not satisfactorily answered. The heart comes nearer to being perpetual motion than any pumping mechanism known to us. It has been shown that if one takes a strip of heart muscle and suspends it in Locke's solution at body temperature, furnishes sufficient oxygen and glucose and removes the products of muscular contraction, chiefly lactic acid, the muscle will beat for many hours. Only under two conditions does the heart cease to beat. One is lack of oxygen, the other is accumulation of lactic acid in the heart. It is known that whatever be the excitant to muscular contraction, when the muscle contracts lactic acid is produced. This must be removed in order for the muscle to recover. Skeletal muscle becomes poisoned if the lactic acid is not removed. The same is true of the heart but the heart is poisoned by only one-fifth as much lactic acid as poisons the skeletal muscles. Further, the pathologist often notes dilatation of the heart when he opens the organ and has argued that therefore the patient died from dilated heart or, in the case of a death from acute infectious disease, that dilatation of the heart brought on death. From this pathological dictum it was logical for doctors who were treating ill patients to attempt to stimulate the heart. The text book therapy of treatment of the failing circulation in the infectious fevers is based upon that false postmortem concept.

It is axiomatic that a tissue deprived of blood first ceases to function, then dies if the blood supply is not shortly resumed. Tissues vary much in their ability to function again after blood deprivation, which after all is oxygen deprivation. The extremes are the higher nerve cells in the brain and the connective tissue cells. The difference is a few minutes, 3 to 5, and several hours. Somewhere in the middle stands the heart muscle. It has been shown that ischemia of the heart causes not only pain but cessation of beat if prolonged over a certain period of time. Anoxemia[2] invariably causes the heart chambers to dilate. This has been experimentally proved. It has been shown that the heart muscle is functionally capable of maintaining the requisite blood pressure in animals ill almost to death with streptococcus, pneumococcus, or diphtheria infection.[3] It has been demonstrated[4] that the blood of dogs ill with

pneumonia is not particularly toxic for normal hearts, and that these hearts become accustomed to the pneumonia blood after a short interval and beat just as strongly as normal hearts perfused with normal blood.

We have known for a long time that certain places in the body are able to hold a large part of the blood out of circulation.[5] These have been called "storage areas". Rarely does the whole volume of blood circulate through the body. Some of it is always flowing sluggishly or even stagnating in the various "storage areas". These are the great splanchnic area, the subpapillary capillary plexus in the skin, the liver and the lungs, the last chiefly under pathological conditions. The legs may hold out of circulation as much as 1000 c.c. of blood. This is from a third to a fourth of all the blood in the body.

Capillaries are short tubes lined by a single layer of endothelium which branch off in clusters from small arterioles and come together again into small venules. Whether the capillaries are directly under the control of the vasomotor system with power of independent contraction or not is not yet settled. At least we know that the smallest pre-capillary arterioles are under vaso-motor control so that contraction or dilatation of them causes constriction or dilatation of capillaries. Exchange of gases, fluids, and salts takes place in the capillary area. The endothelium is permeable to these substances. Under normal conditions the pressure within the capillaries exerted by the proteins and globulins of the blood varies but little from the pressure of the tissue fluids through which the capillaries pass. Exchanges from blood to tissue and vice versa depend upon relatively slight differences in osmotic pressure. The pressure exerted by the blood in the capillaries is now known as the oncontic pressure, abbreviated from the former term colloid osmotic pressure.

It is said that the Ca-ion decreases permeability and the Na- and K-ions increase permeability. Histamine and histamine-like substances which are produced by the action of various bacterial toxines upon cells increase permeability. All have seen petechial hemorrhages and transudation of fluids into tissue as the result of infection. Anyone who has ever had a furuncle knows that there is fluid outside the capillaries in the subcutaneous and epidermal tissues. If the damage to the endothelium of the capillaries is not too great only fluid containing some protein passes out. When the damage is great whole blood passes out into the tissues.

Oxygen is carried in the blood by both the plasma and by the loose combination of oxyhemoglobin in the red cells. The immediately available oxygen is in the plasma, the storage place is the red cells. There is both external and internal respiration, both having to do with oxygen-carbon dioxide exchange. The former takes place in the lungs, the latter in all the tissues throughout the body. Lack of oxygen spells death to cells and eventually to collections of cells, the animal.

The heart muscle has its own blood supply derived from the two coronary arteries which open behind the anterior and posterior valves of the aorta in the sinuses of Valsalva. The left (anterior) is the larger and supplies the septum and the greater part of the left ventricle. The right (posterior) supplies for the most part the right ventricle but also a portion of the posterior wall of the left ventricle. The sino-auricular node has blood supply from both coronary arteries. The A-V node and the His bundle apparently receive blood only from the left artery and the anastomoses are not well developed. The arterioles of the heart are not strictly end arterioles. There are anastomoses between the two coronary arteries and the extent of anastomosis is exceedingly variable in different hearts of the same animal species. Cases are reported of people living with one coronary artery completely occluded at its orifice. Indeed cases are on record of people living with occlusion at the orifices of both coronary arteries. The patients must have lived for some time with this condition; thus it must be that under certain conditions the heart muscle can get its supply of blood from the blood which is in the chambers and reaches the muscle through the Thebesian vessels.

PATHOLOGICAL PHYSIOLOGY

Heart failure may occur with or without lesions of the valves. When a valve is the

seat of some infection, which invariably begins in the vessels which run in the valves, and the valve no longer is able to close the opening, mechanical factors cause readjustment of the circulation from the heart. Recently Von Glahn and Pappenheimer[6] contended that the infection with non-hemolytic streptococcus, which gives rise to subacute bacterial endocarditis, occurs from the implantation of organisms upon unhealed rheumatic nodules. If no strain is put on the heart while it is in process of accommodation to changed conditions it accommodates itself and when the infection on the valves heals, the heart muscle is able to carry on the circulation and to show a reserve power sufficient for all ordinary strains. In fact some hearts with damaged valves appear to recover their reserve power to such an extent that their possessors can carry on competitive athletics without any distress. As a rule, hearts with healed valvular disease have not the reserve power of normal hearts and those who have such damaged hearts should govern their lives accordingly.

Heart failure is the inability of the central pump to move the blood around the circulation. It is generally accepted that the force of the heart contraction alone is sufficient to force blood throughout the body and back to the heart aided by valves in veins and skeletal muscular contraction. However, when one sees circulation carried on with a pulse pressure of only 10 to 15 mm. of Hg and recalls that friction must use up all of that force one wonders how blood returns to the heart. There is evidence that there is peristaltic action of arterioles as well as of venules,[7] so that heart failure must be not alone weakness of the heart muscles but some interference with the mechanism of arterial peristaltic action throughout the body in all the tissues. The venous pressure rises in the small venules, the circulation is slowed in the capillary bed and exchange of gases and salts is interfered with. It is generally accepted that there is (1) right-sided, (2) left-sided, (3) total failure.[8] The classic example of the right-sided failure is mitral stenosis. The right heart is hypertrophied and the chamber is dilated. The left auricle is hypertrophied and dilated. The left ventricle is small particularly in pure mitral stenosis (Durossiez type). The right auricle is normal. Following infection or too great a mechanical strain the right ventricle which has not the reserve of a normal ventrical dilates and blood regurgitates through the tricuspid valve. The first effect is stagnation of blood in the liver and the organ enlarges. The liver can hold within its capsule about 2/3 of the total body blood. At the same time the heart beats increase in number per minute because the left side of the heart receives less blood but the circulatory demands or the body remain at least the same. Stroke volume is less so total minute output is kept constant by increase in heart rate. Diastole is shortened, therefore recovery time is shortened and the blood flow in the coronary arteries is interfered with. This further embarrasses the heart by reducing the available oxygen and tends to increase the dilatation of the right ventricle. Now if at this stage the patient is put at rest and digitalis given, the heart is slowed; diastole is prolonged; oxygenation improves; better ventricular filling occurs without overstretching of fibers, with consequently stronger contractions and the circulation rights itself. Further dilatation, however, increases venous pressure in the portal and systemic circulation. This is passed back to the capillaries and fluid is pressed out of the capillaries into the tissues. As long as the venous pressure is above capillary pressure edema will persist. Now one has to resort to methods of reducing venous pressure. In the meantime further anoxemia of heart muscle occurs, the left ventricle now weakens and blood is dammed back on the lungs causing congestion, then edema. The heart now is grossly embarrassed. Its own circulation is interfered with and unless something is done to relieve the heightened venous pressure over the body, the heart will cease beating as the result of anoxemia and lactic acid poisoning.

In left-sided failure as in the hypertensive heart with decreased reserve power, the first effects of dilatation, usually the result of physical strain are felt in the lungs. Breathlessness on exertion is the first symp-

tom. The congestion of the lungs interferes with aeration of blood and if this is carried too far the right ventricle dilates and increased systemic venous pressure is added to that in the lesser circulation. The muscle fibers of the hypertensive heart are actually thicker than those of normal heart so that exchange of gases is somewhat slowed normally. When oxygen-lack is greater lactic acid accumulates in the heart; it also accumulates in the blood. The liver can not synthesize it into glycogen so that finally the heart ceases to beat, poisoned by the accumulation of its waste products. It is a chemical death and so is not discovered by the usual postmortem examination.

Under all conditions of increased venous pressure the nutrition of the various tissues suffers. At first the stagnation in the capillaries causes more oxygen to pass out into the tissues than normally passes out. The venous blood shows increased oxygen unsaturation, that is, there is less oxygen in venous blood than there normally is. The lessened oxygen in peripheral blood produces cyanosis of the skin and of the internal organs. All the tissues suffer from lack of oxygen. The respiratory center in the medulla is at first stimulated by the increased carbon dioxide of the blood and the lack of oxygen, but eventually it too is poisoned by oxygen want and this finally ceases to function.

Breathlessness on exertion is also often the first symptom of mitral stenosis or/and insufficiency. In such cases the lungs are constantly mildly congested from back pressure from the left side of the heart. Now under the stimulation of exercise the skeletal muscles call for oxygen. In the last analysis that is the reason for increased blood flow, viz: to supply more oxygen. Venous pressure rapidly increases, the right heart can not send blood fast enough through the congested lungs, carbon dioxide accumulates in the blood and respiration is stimulated. However, the CO_2 can not be rapidly washed out of the blood as it normally is on account of the lung changes so that dyspnea lasts much longer than normally and a sensation of inability to expand the lungs is complained of by the patient.

One important fact is often completely forgotten in the effort to treat the heart. This is the evident fact that if the heart is suffering from lack of oxygen the whole body is suffering too. All the organs are slowed down. The liver can not work properly, the kidneys can not secrete urine, the intestines can not absorb food materials, the glands of internal secretion can not regulate the body processes. In brief, the whole organism is suffering, not the heart alone. This fact, I repeat, is one that is not enough considered. Too frequently the whole attention is paid to the heart. It is irregular and rapid so electrocardiograms must be taken and carefully studied in order to determine what is the matter with the heart, while in the meantime the whole body is suffering from the lack of the most important constituent for normal metabolism.

My second proposition is that the treatment of heart disease should begin when the heart is first damaged. Obviously this is impossible in the degenerative heart disease of older people as no one can say when the heart disease begins. However, in children who have acute rheumatic fever, scarlet fever, diphtheria or some prolonged infection it is possible to begin treatment at the time of the illness. While it has been shown[9] that the heart itself rarely if ever fails in the acute fevers, that does not mean that the heart muscle escapes the damage that other tissues suffer as the result of the bacterial toxines. It would appear that the reserve power of the heart is so great that if it is furnished oxygen and glucose and sufficient venous return flow to fill the ventricles adequately it will continue to beat in spite of a violent infection.

The heart never rests. The only rest it has is in the prolongation of diastole by slowing of the rate.

When a child has one of the infections mentioned, particularly if it is acute rheumatic fever, the heart muscle is injured. The child's fever returns to normal, he is apparently well but the heart rate remains rapid and he tires upon the least exertion. Usually little attention is paid to the rapid heart, gradually it ceases to annoy him so that he plays and exercises apparently just as well as he did before he was ill. Years later

he suffers with heart failure as the result of the damage done to his heart in his youth. Can the heart failure be prevented by any measures taken in youth at the time of the infection? I believe it is possible to postpone the heart failure to a later age period.

Many writers have stressed the point that children are allowed to resume their activities too soon after a serious illness. They would keep the children in bed for days or even weeks after the fever had disappeared. All recognize that this procedure is advantageous but difficult, yet it is the one and only means of preventing the late consequences of heart injury.

To treat heart disease properly, let us begin by treating it when the injury begins. Rest and time are the only two therapeutic procedures which are at all efficacious. Mothers want a bottle of medicine to stop the child's heart from beating so fast, so doctors give digitalis in some form. It is doubtful if digitalis has any slowing effect upon such rapid hearts. Rest and time, rest and time; it is marvellous what the heart can do if given rest and time to recover. Keep the convalescent children in bed longer than might be thought necessary. It is better to err on the side of safety.

TREATMENT

The treatment of heart disease, as has been indicated within, is really a dual problem, measures to steady the heart itself by using drugs of the digitalis series, and measures to treat the ill patient who has the bad heart. If I were compelled to choose which I would treat, the heart or the patient, I should unhesitatingly choose to treat the patient, knowing full well that if I reduced venous pressure, if I furnished more oxygen the heart, unless too far gone, would take care of itself. How often have all of us seen a complete 24-hour bed rest change an edematous, dyspneic patient into a much less edematous or even non-edematous, and quietly breathing patient? All of us recognize the value of absolute bed rest. Possibly we do not realize that after an attack of heart failure length of rest is most important. The doctor who can keep his cardiac patient in bed the longest is the most successful doctor for patients with heart failure. To the restless, obstinate, bull-headed patient who knows he is able to return to work as soon as his edema and dyspnea have disappeared, I ask the question, "Suppose you broke your thigh bone, how long would you remain in bed?" Invariably the patient answers, "Oh, several weeks, I suppose." Then he is reminded that he can lose his leg, get a wooden one and carry on his occupation, but he has only one heart, this is broken and he had better give it just as long to heal as he would give the broken bone in his leg. While this formula does not work with all, it works better than any I have used.

Of all the measures to reduce increased venous pressure and to relieve the right side of the heart none equals venesection. This procedure for this purpose is certainly half a century or more old. Over thirty years ago we were using it in the hospital where I was an interne and I have been doing venesections ever since. In one case I removed 1750 c. c. of blood at one sitting. This was a man over 6 feet tall, who weighed 300 lbs., and whose anasarca was extreme. He recovered, went back to his work, developed a strangulated umbilical hernia and died of peritonitis following operation. As a rule 500 c. c. is the minimum amount which should be removed at one venesection. The result of the procedure is often dramatic, and frequently no drug is needed. Rest and time return the patient to comfort and ability to carry on, but at a lower level.

It is an art to perform a nice venesection and few physicians seem to have acquired it. One requires very simple apparatus, a tourniquet (rubber tubing), a small sharp curved bistoury, a large pan, alcohol and cotton. It is best to lay newspapers on the floor and on the bed clothes. The tourniquet is tightened on the upper arm so that the cubital vein stands out and the radial pulse is easily felt. This is pressure just about equal to diastolic pressure. The skin is cleansed with alcohol. An assistant holds the basin inside towards the arm in order to catch the first spurt which may reach 3—4 feet. Now the operator makes a quick jab alongside the vein and brings the point of the knife across the top of the vein so as to nick it. The

wound gapes and blood spurts out. To cut a vein through in doing a venesection is reprehensible. As soon as sufficient blood is obtained, the tourniquet is released, the wound, usually only a quarter to a third of an inch long, is wiped dry and clean gauze placed on it held with a snug but not too tight bandage. Within a week all that is seen is a small scar and the same vein may be used again as its patency is not destroyed.

We no longer use hydragogue purgatives to assist in reducing edema. Unless the kidneys are known to be functionally insufficient, this is not usually the case in edema of heart failure. Diuretics are the best means of decreasing edema. There are a number of active diuretic drugs; the most active in my experience is the organic mercury one known as Salyrgan. This should be given intravenously with great care that not the least bit gets into the subcutaneous tissues.

It was said above that anoxemia of all tissues is a part of heart failure. Rapidly available oxygen is needed by the cells. This can be furnished by the newer types of oxygen tents or by a nasal catheter method.* Some do not like the tent, some do not like the catheter in the nostril. Usually by one or the other method the patient can get oxygen at 40–45 mm. pressure. This forces oxygen into the blood plasma and makes it available for the tissues. When dyspnea is extreme I know of no procedure more comforting to the patient, or one which aids more in relieving the whole picture of heart failure. In all cases the oxygen should be very gradually reduced to the air content. I am sure that the wider use of oxygen properly administered would give comfort to many distressed cardiacs. Barach feels that it prolongs life and I agree with him.

Some years ago we used to see cardiacs with such enormous swelling of the lower legs that superficial ulcerations resulted. Occasionally we see one such case now. The edema can be readily reduced by carefully cleansing the skin and sticking long (spinal fluid) needles into the edematous tissues, the point directed toward the knee. The needles are held with adhesive, and tubing leads into a convenient vessel. Tubes known as Southey's tubes were used years ago, but needles are just as efficacious. Great care must be used to see that technique is sterile, as the tissues are less resistant than normal, and an erysipelas infection has been known to develop and cause death. Finally, what shall the patient eat? Obviously when heart failure is extreme the patient is nauseated, often he is vomiting. Measures instituted at once to aid returning circulation will relieve the congested stomach and hence relieve th nausea. The quart of milk daily, Karell's diet, is often best for two to three days. After that with returning appetite the diet high in corbohydrates (F. M. Smith) seems beneficial. The total quantity should be reduced. It does not seem wise to hold off from meat and eggs too long. Many old cardiacs suffer from anemia which adds to their discomfort because they have been kept for too long on a pap diet. One should watch the blood and combat oncoming anemia with iron in some form. I have never felt that there should be any special diet for the chronic cardiac case. His only restriction is quantity not quality. Most people know their own powers of digestion better than any doctor and they can be trusted to eat only foods which agree with them. It does undoubtedly help in controlling certain people to lay out a diet list for them.

A few words should be said about the use of digitalis for even today the drug is not always properly administered. Its chief action is upon the vagus nerve. It blocks impulses coming through the A-V node and therefore tends to slow ventricular rate. For example, it is not so important that the auricle is fibrillating or in flutter provided the ventricular rate is 70-80 beats per minute. Digitalis should be given in doses large enough at 6 hr. intervals so that the patient becomes digitalized within 36 or at most 48 hours. It takes approximately one grain of the leaf per 10 lbs. of patient to accomplish this effect. Thus a patient weighing 150 lbs. will take about 15 grains or equivalent in tincture. Three to four grains should be given then every 6 hours until signs or symptoms of digitalis effect are apparent. The

* Waters has devised a simple method of delivering a known volume of oxygen through a nasal catheter.

drug is stopped and continued in doses of one to three grains daily after about a week or ten-day interval. This dose may be continued for months or years.

Morphine is almost a specific for the sudden attack of edema of the lungs and it is the only drug which calms the hypertensive patient who has attacks of nocturnal dyspnea. Codein sometimes works but not often, in my experience.

SUMMARY

Two propositions have been stated and discussed. (1) It is more important to treat the patient who has heart failure, than to treat the heart of the ill patient, (2) Treatment of heart disease caused by the infectious fevers in childhood should begin while convalescence is taking place.

Rest and time, the two sovereign remedies as Sir Wm. Osler called them, should be more deliberately used.

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Early Spondylolisthesis; Case Report*

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IN THE few minutes at my disposal, I wish to report a case of apparently spontaneous spondylolisthesis occurring in a very young girl. I regret very much that I am unable to present the patient, but as she lives at a considerable distance, it was impossible for her to be present. My acknowledgments are due to Dr. R. L. Troup, of the Green Bay Clinic, who very kindly referred the patient to me.

The case is of interest for several reasons.

First, with the exception of a congenital case of spondylolisthesis in an infant, recently reported by Kleinberg of New York, the present case is the youngest one on record. Previous to this, the youngest individual in whom the condition had been observed was a child of ten.

Second, there was an entire absence of trauma or other etiological factor to be elicited in the history. So far as is known, this case is one of spontaneous development.

Third, there was an entire absence of symptoms of any kind, except the difficulties arising from mechanical reasons. It is surprising that with the extensive degree of displacement present, some neurological symptoms were not to be found.

The patient is a girl, who, according to the mother, was born January 28, 1925. Thus at the time of my first examination, early in January, 1934, she lacked a few days of being 9 years of age. The only reason for seeking medical attention was on account of the spinal deformity.

The mother stated that the child had always been healthy. She was the youngest of several children, and so far as could be learned, had always been entirely normal until a few weeks previous to examination, so far as the mother's observation went. The statement was very definite that she had run about and played the same as other children.

About six to eight weeks before we saw her, the mother had begun to notice a rapidly increasing deformity of the child's lumbosacral region; at the same time she developed a peculiar gait and had difficulty in bending forward. No symptoms whatever were complained of by the patient herself.

Physical examination showed a child of

* Presented before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, September 1934.

somewhat above the average growth and development for her age. With the exception of the spinal findings, nothing of any significance was discovered in her general physical condition.

Upon inspection of the spine, with the patient standing erect, a marked scoliosis was seen to be present. In addition, the sacrum was very prominent, with a definite depression just above it, and a very noticeable shortening of the lumbar spine. Forward bending of the spine was very decidedly limited, and the same was true of the other motions. The gait was somewhat waddling, and there was prominence of the gluteal region. There were no neurological findings.

Stereoscopic antero-posterior and lateral x-ray films of the lumbar spine showed a complete forward dislocation of the entire upper spine on the sacrum; except for the presence of 6 lumbar vertebrae, the spine above this level appeared normal. (Figure 1.)

Treatment consisted in inserting a posterior bone graft taken from the tibia, with the hope of stabilizing the spine, and preventing further displacement. No attempt was made to correct the deformity, as I knew of no method by which this could be safely done. What the ultimate outcome of this case will be, and whether the treatment will be successful to the extent hoped for, remains to be seen. There had been no increase in the deformity when the patient was last seen, about a month ago; as a matter of fact, the mother thought that she was definitely more active, and that her gait had improved. I hope to be able to keep her under observation for a considerable length of time, and to record the changes which may occur with development after puberty.

Figure 1.

Surgical Treatment in Pulmonary Tuberculosis at the Wisconsin State Sanatorium

By R. D. THOMPSON, M. D., SUPERINTENDENT—E. K. STEINKOPFF, M. D., K. G. BULLEY, M. D., and C. M. YORAN, M. D.

Staff Physicians, Statesan

IN THE fall of 1929, when a definite step was taken to establish a department of surgery at this Institution, there were four cases out of one hundred forty-two patients receiving surgical collapse, and that was in the form of artificial pneumothorax.

The value of surgical treatment, in addition to administration of pneumothorax, was definitely known and many cases were found in routine examination which came under the different indications for phrenicectomy, scalenectomy, and thoracoplasty. In 1929 the new hospital building had just been opened, complete with a surgical department, modern laboratory, and x-ray facilities. These conditions made it possible to devote a large part of the third floor to surgical cases, for private rooms were afforded there and the all-important after care, especially following thoracoplasty, could be carried out in detail.

We firmly believed that the institution of a detailed surgical department, with trained personnel and carefully guided work, would be of a decided economic value to the State and that the saving would more than cover the cost of modern and complete equipment and this has been found true.

The members of the State Board of Control, under whose direction this Institution functions, were very cooperative in their attitude toward obtaining complete surgical and other modern equipment which is so necessary. The Board thoroughly understood that this was a definite step in required sanatorium treatment and was very willing to endorse a change that would abolish the "boarding house" idea of the old Sanatorium and create a modern institution that could give adequate care and attention to all cases that came to the Sanatorium from over the State.

Our first case of thoracoplasty well demonstrated the economic factor that surgery brings into sanatorium care. This case, a school teacher, had been in various publicly-owned sanatoria for fourteen years and was a typical unilateral case with cavitation who had had a positive sputum throughout her sanatorium life. Very shortly after admission a phrenicectomy was done, followed by a three-stage thoracoplasty, and in two years she was out and earning her own living. We have had several other cases who had been in sanatoria from four to eight years, and, after proper surgical collapse, were able to return to their families and society, without danger to others, and proved able to maintain themselves.

The work in doing surgical collapse neither begins nor ends at the door of the operating room corridor. There must be a careful study of each individual case, and this study includes a complete history, physical, x-ray and laboratory examinations, together with a clinical knowledge of the patient which can only be obtained at the bedside by daily care and observation. We feel that all these factors are essential if successful results are to be obtained.

The careful selection of cases is of great importance, this demanding judgment and seasoned opinion, usually after prolonged study and observation of each individual. The case selected for surgical collapse is reviewed by the staff at the weekly staff meeting and in consultation with the surgeon, Dr. Joseph Gale. Dr. Gale, who is Associate Professor of Surgery at the University of Wisconsin, has operated on all our cases, and his splendid cooperation, intense interest, careful technic, and untiring efforts have been major factors in the success of our surgical program. The selection of the case is not a small problem, nor is the type of collapse to be used always an easy decision. The opinions and judgment of the entire staff and surgeon are always used, not only for the primary operation, such as phrenicectomy, but also for further collapse, should it be deemed necessary.

Successful results in our first cases were most diligently sought, as we realized that the future of our surgical program depended largely upon these results, and we were happy to find that the recovery of our early cases induced a splendid, cooperative attitude in nearly all patients selected for surgical collapse. At first it was difficult to prove to a few patients that some form of surgery was absolutely indicated, and that this was not just another heralded remedy without foundation or merit, and that such procedures were not experimental. During the past three years the attitude of the patients has changed from one of doubt to one of confidence and they now seek, rather than avoid, some form of collapse therapy which will aid them to make a more assured and more rapid recovery.

The question of anaesthesia is of vital importance and we have been fortunate in having the services of Dr. M. J. Severs, Associate Professor of Pharmacology, of the University of Wisconsin, who administers all of the general anaesthetics. The first two years avertin was used for all stages of all thoracoplasties, but many cases showed considerable postoperative shock, with a prolonged period of very low blood pressure after being returned to bed. Dr. Severs then instituted a combination of nitrous oxide, ethylene-oxygen anaesthesia, with a high rate of oxygen, using the Water's closed system with a rebreathing bag. This proved to be economical

and the results were most gratifying. The general response of the patient was much better. When avertin was used it was necessary to cleanse the rectum thoroughly and catheterize the patient frequently postoperatively, to aid in eliminating the drug. All of this additional handling and disturbance was avoided by the use of gas anaesthesia. This type of anaesthesia permits an earlier return of the cough reflex, which is an aid to the patient in removing any mucus or purulent material which may have been forced into the bronchial tree from the collapsed lung.

Less moving and handling of the patient after the operation seemed very important. Transferring the patient on a hospital cart was eliminated by having the patient's bed brought to the operating-room door.

Immediately upon return to bed supportive measures are used. The patient is given 500 to 1000 cc. of 5 per cent glucose solution intravenously. Should the patient's condition necessitate, he is given continuous oxygen intranasally, the catheter being held and maintained in position by adhesive tape. Oxygen, sufficient to avoid cyanosis and obtain stabilization of the pulse, is administered for twenty-four to seventy-two hours as may be required. Commercial oxygen in large tanks is used and the gas flows through a reducing valve and humidifier which offers a very simple and yet efficient and economical method of administration.

Our paravertebral thoracoplasties are done in three stages, from above downward. The twelfth rib is left in place. The interval between the stages is not more than two weeks. It is indeed surprising to see practically every case respond so favorably to such a radical procedure, even as early as following the completion of the first stage. As a result of placing the diseased areas at rest, limiting and inhibiting toxic absorption, a very definite psychic improvement takes place. The patient realizes that something more is being done than just being afforded hygienic care, rest, and food. We not infrequently see the sputum become negative before the second stage, and more frequently following the second stage.

We firmly believe that all chest surgery for tuberculosis should justly be done in the sanatorium, and not in a general hospital, unless that hospital has set aside a certain area or floor for tuberculous patients, manned by a personnel experienced in the care of such patients. It has been our experience that a tuberculous patient receiving surgical care in a general hospital without a department for such cases, will not receive adequate rest periods, constant observation, and the important general hygienic treatment for tuberculosis that is so necessary after thoracic surgery. By doing collapse surgery in the sanatorium, the patient is not subjected to transportation of any kind before or after operation. This is definitely contraindicated in extensive pulmonary disease.

Realizing that the postoperative care of these patients differs in a great measure from that necessary in general surgery, we have found that careful training and supervision of our nursing staff in this type of case is essential. Careful handling of this class of patients by our personnel has been of distinct advantage, both from the standpoint of mental as well as physical assistance.

We realize that chest surgery is not a cure-all, but is a definite adjunct to the modern treatment of tuberculosis and must be followed by weeks and months of sanatorium residence and observation. Graduated exercise must be carefully prescribed in the postoperative program, and only as it is indicated by frequent laboratory, x-ray, and clinical studies, which must be made if success is to be expected.

It is our intention that this be a preliminary paper on the surgery for pulmonary tuberculosis done at the Wisconsin State Sanatorium. It is our desire to follow this with further papers on surgery, both conservative and radical, detailing the different procedures with case reports from our records, so that a cross section of the work and the results obtained may be seen.

PARATHYROID HORMONE THERAPY

Joseph C. Aub, Boston (Journal A. M. A., July 20, 1935), states that the chief therapeutic value of parathyroid extract is dependent on its influence on the blood levels of calcium and phosphorus. Its major use, therefore, lies in the treatment of acute low calcium tetany. In this condition it may be a life saving measure. Parathyroid extract may also be chosen for other therapeutic purposes.

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« « « EDITORIALS » » »

Balance

IN THESE days of mass disregard of intake and outgo, of cause and effect, of supply and demand, of action and reaction in industry, society, legislation, economics, public and private budgets, with resultant imbalances, the physician might well pause to ponder the problems of balance in the human, physiological economy.

Health may be characterized by *balance* and disease by *imbalance* between the functions of the various structures, organs and systems of the body.

The constant changes, due to normal functions and wear and tear, from equilibrium to disequilibrium, with constant re-establishment of equilibrium, seems to be regulated by correlated changes in such fundamental factors as the acid-base and the sympathetic-parasympathetic balances of the body.

The mineral and chemical components, the electro potentialities and the Ph. of fluids, have been utilized in industrial and agricultural activities. The clinical conditions of acidosis and alkalosis have directed attention to the acid-base equilibrium in the human which is found to be connected with the activities of the autonomic nervous system.

The opposing functions of the parasympathetic and sympathetic divisions of the autonomic nervous system have been attracting attention ever since the work of Eppinger and Hess (1910) in which they attempted to classify all individuals as either vagotonics or sympatheticotonics, but because of conflicting and overlapping symptomatic findings, such a clinical differentiation has not been accepted, though the existence of such types is well recognized.

As these chemical and nervous phenomena are closely studied one finds that they are dependent upon still more fundamental influences, such as heredity, the environment (external and internal), the excretions or secretions of various organs or glands, and the products of cell destruction. The *external* secretions from such structures as the skin, gastro-intestinal mucous membrane, and special organs such as the liver, pancreas, etc., are well understood. The *internal* secretions (hormones) are of more recent discovery and their functions are in many instances undetermined, but they have assumed a recognized position in the treatment of many diseases or disorders. This fact is emphasized by the extended series of articles now appearing in the Journal of the American Medical Association under the title, "Glandular Physiology and Therapy", and by the deluge

of printed matter, often in striking colors, distributed to the physician by the commercial pharmaceutical chemists.

Correction of various physiological imbalances may be attempted by substitution, antagonism, or by deprivation.

In certain *hypofunctional* disorders of the thyroid, parathyroid, pancreas, adrenal, pituitary, ovary and liver, substitution therapy has been more or less effectual.

In certain *hyperfunctional* disorders, antagonistic therapy may be indicated such as alkalies in acidosis; acids in alkalosis; iodine in hyperthryoidism; sugar in hyperinsulinism and salt in Addison's disease. It may also be found in the antagonism between salivary, peptic, and pancreatic secretions and between such endocrine glands as hypophysis and gonads; adrenal and thyroid, etc.

This matter of endocrine balance has been carried a step further by the discovery that antagonism may occur not only between different glands but also between different portions of the same structure as in the ovary, pituitary, adrenal and stomach.

The question of the possibility of the development of an anti-hormone or an antibody by the repeated injection of certain of the organic extracts has not been settled, but is much discussed and presents immunological possibilities which should serve as a warning against over-enthusiastic and indiscriminate therapeutic use of endocrine secretions.

The reactions of the cells of the reticuloendothelial system (spleen, lymph glands, liver, thymus, adrenal bone marrow, etc.) are still comparatively unknown but probably are of considerable importance in establishing and retaining proper balance between the body fluids and body cells and probably is the basis for the numerous specific or nonspecific protein shock treatments.

In other *hyperfunctional* disturbances therapy by operative removal has proven effective, e. g., in thyroid, parathyroid, pancreas, or stomach diseases.

Another disturbing element to equilibrium seems to be the product of digestion or disintegration of exogenous (food) and endogenous (body) proteins, so-called "tissue substances".

Victor Vaughan (1913) demonstrated a poisonous and non-poisonous protein fraction, and Loewi (1921) proved that vagus stimulation was caused by acetylcholine (an aminoacid with histamine-like properties).

The opposing or counteracting stimulus to the sympathetic is epinephrin from the medullary portion of the adrenal glands.

The constant disequilibrium and return to equilibrium of these aminoacids and epinephrin and other hormones seems to be of vital importance in the human economy. They control in a large part the sympathetic-parasympathetic function and balance, which in turn controls blood pressure and blood supply, filtration, dilution, surface tension, osmosis, and other biochemical or biophysical properties which change the acid-base, carbon dioxide-oxygen, electro positive, electro negative and other balances, which, in turn, modify the constituents of the body cells, the body fluids and the cell membranes that separate each from the other, and from the external environment.

Attempts to juggle this balance, which is an important factor in most therapeutic measures, demands, on the part of the physician, knowledge of normal physiological functions, and a very delicate, personal balance between over-enthusiasm and wishful thinking on the one hand, and sound medical judgment, that most necessary quality, on the other. F. G. C.

Treatment of Constipation

CONSTIPATION is an important symptom in itself, and in addition it is the presenting syndrome in a number of conditions which must be attacked if the constipation is to be successfully treated. At times the constipation may be disregarded and responds satisfactorily if the basic condition is corrected. Drug addiction, malnutrition, obesity, pellagra, scurvy, achlorhydria, tabes dorsalis, cord lesions, several types of pituitary disease, cerebral injuries, arteriosclerosis, diabetes mellitus, insipidus and thyroid disease are a few conditions that may be mentioned in which the symptom of constipation need not be treated if the underlying cause can be treated satisfactorily.

Distention in pneumonia and typhoid particularly is probably due to a toxic atony of the colon. With reduction of pressure within the gut, gases are unloaded by the blood during the highly toxic state to an extent not possible when the tone is within the normal range. Methods of maintaining intra-abdominal pressure must then be considered and contraindications kept in mind. Other fevers and infectious diseases less frequently present this problem which is closely related to constipation, although not strictly within its limits. This type of problem has been well discussed by Alvarez.

Local anal and rectal irritation should be treated carefully. In certain instances the aid of a proctologist is of great value in clearing up such lesions and shortening the illness. Irritating conditions and foci of infection causing local and systemic reaction should receive appropriate treatment whether medical or surgical. Obstruction of the gut, whether partial or complete, from any of the various possible causes should be observed carefully. Here surgery carried out with judgment and skill is of the greatest service.

The old classification of "atonic" and "spastic" constipation is slowly being discarded since there is little or no evidence to support the view that atonic constipation actually exists. As this view becomes more widely disseminated among the members of the profession and later among the laity, the present fad for high residue diets by addition of bran, and bulky products of other plants such as rye, and mucin-like products of okra, psylla, and linseed, etc., will sink into the discard they seem to deserve in the treatment of constipation. The high roughage diets have limited value in the treatment of constipation. This may be illustrated by the universal experience with adding roughage in the form of 5% vegetables to diabetic diets. A few patients bless their physician for correcting their constipation. Others, however, develop constipation for the first time which may go on and become more and more troublesome. Bran or bran-containing "health foods" must be used with discretion as deaths have been reported as being due to impaction and consequent rupture of the intestines.

Regular and natural habits of elimination must begin during infancy. The period just after breakfast is the best time for the majority of people as it comes after the longest fast of the 24 hours when the rest leaves the bowel very reactive and it reacts most promptly to stimuli. Voluntary action as expressed by forced contraction of the abdominal muscles may push the fecal mass into the rectum and initiate the reflex. The urge to defecate should have prompt response at whatever time it occurs. Having the individual rise early enough so as to have time to have a stool after breakfast before the day's work begins is of great prophylactic value.

The diet should be fitted to the problem. The human gut is intermediate between the carnivorous and herbivorous types so a perfectly bland diet is unsuited as well as those composed largely of roughage and cellulose. Also, in recent years the carbohydrate, protein, fat, vitamin and mineral contents of foods has so engrossed the attention that little consideration is given to the digestibility of foods as compared to their composition. It is also worthwhile to keep in mind that 45 or 50 different conditions that have been considered distinct enough to be described as clinical entities by various authors have come to be regarded as having a common cause, namely allergic reaction to ingested food, and may need to be considered in reference to any individual patient. Thorough mastication must be practised.

Some patients respond to digestive disturbances by eliminating from the diet first one type of food after another till the lack of food volume, calories and vitamins become a problem. This occurs with greater frequency than generally supposed and the mild forms of avitaminosis are hard to recognize. Frequently such patients resist the replacement of vitamin-containing foods. Then the vitamin concentrates have a value exceeding their cost.

Many find belladonna and its derivatives useful in "spastic" constipation when given in full physiological doses. Sedatives are frequently a great aid in relaxing a tense individual.

Laxatives, purgatives, cathartics and mineral oil have no right to occupy the position of importance which they now hold in the treatment of constipation. The laxatives purgatives, and cathartics cause inflammation and irritation, alter secretions, and by abstracting water and reducing residue diminish fecal contents so no normal defecation reflex can arise. Mineral oil is a foreign body, though belonging to the paraffin group, and is unaffected by the digestive processes. It retards the rate, if not completeness of the digestive process, in a number of individuals introducing new symptoms or aggravating former ones by its continued use. It is also possible that habitual taking of mineral oil prevents the absorption of the fat soluble vitamins. The principles of logic seem to be violated when an inert indigestible oil is introduced by mouth when the place of action desired is in the last foot of the terminal portion of the large intestine. Careful instruction in the use of small oil enemas on retiring at night should reduce to a large extent the taking of mineral oil and eliminate the undesirable features of the procedure. Laxatives, cathartics, and purgatives all act by irritation of the digestive tract at one point or another. The gut acts to expel the irritating agent and in the process of expulsion fecal material is carried along as more or less of a side action. Saline cathartics of various types are believed to act by abstracting water from the intestinal wall. This action seems doubtful as little of the salt is recovered from the liquid stool, while almost all of it can be recovered from the succeeding formed stool.

The present excessive use of agents to combat constipation seems to indicate lack of thought on the part of the public, and either lack of thought or lack of energy on the part of the profession in combating the deleterious, promiscuous use of these agents which are chiefly sold across the counter on demand of the public. Unfortunately, patients are sometimes started on a life-time of habitual use of cathartics by the original prescription and direction of a physician in its use.

Habitual use of enemas involves even greater evils than laxatives when their use is uninstructed and consequently ill-advised. In certain individuals the use of enemas becomes a type of perversion. As commonly used, enemas depend on soap and other irritating agents for their activity. Plain water is also somewhat irritating. For ordinary purposes normal saline is the least irritating form of enema, getting results by adding volume to the bowel contents. Difficulty in expelling all of the enema, which is often encountered, is not a disadvantage when a normal saline enema is used, for the water and salt are readily absorbed and utilized by the body. In this connection it may be of value to again call attention to the fact, shown by Friedenwald and Morrison in greatest detail, that colonic irrigations can develop so-called "colitis" in a healthy animal with typical mucus, pain and irritability. N. A. H.

The Annual Reports

IN THIS issue of the Journal are to be found reports of the officers of our Society and the several standing committees. Despite the fact that they are written in summarized form, it is to be noted that they fill twelve and one-fourth pages of our Journal. In addition, a special report of the Committee on Public Policy is to appear in the next issue.

The work of the State Medical Society may well be likened to the application of scientific medicine itself. It has both its curative and its preventive fields of endeavor. And of particular interest to the observer is the fact that the Society has accomplished so much in that field which we likened to the effort of preventive medicine. This means that the Society has been continuously successful in its efforts to guide health endeavors and health efforts into those channels wherein experience has demonstrated that the work will be successful and away from those channels where experience has demonstrated that the work will be at least unsuccessful if not a positive menace to proper public health development within our state.

DEATH OF DEAN JERMAIN

Dr. L. F. Jermain, Dean Emeritus of Marquette University School of Medicine, died on July 24th. The full notice will appear in the next issue of this Journal.

.... THE PRESIDENT'S PAGE ....

Our Future Plans

ONE of the conditions that is typical of such a period as that through which we have been passing is the tendency to classify current thought as either being ultra-conservative or ultra-liberal. If one makes the statement that he thinks we should go cautiously, his opponents immediately say "he is a mossback". If one makes the statement that he believes very considerable change is necessary, then he is accused of being a "radical".

In the consideration of plans for our ever progressive changes in the distribution and delivery of medical service, we should be very careful to avoid these classifications. Certainly we can all agree upon the basic fact that in no profession, in no trade, and in no walk of life has there been such progress as that which has been made by the profession of medicine during the last fifty years.

Secondly, we think all will agree that to a far, far greater extent than most laymen realize, the discoveries of medical science largely have been made available to all regardless of their financial status in life.

Third, we believe any thinking physician will agree that just as there have been constant changes during this half-century, so may we well assume that there will be constant changes during the years to come.

Fourth, and finally, we want to suggest, and the thoughtful physician will agree with us, we are sure, that perhaps there has been a tendency for us to stress the economic side of medical service during the past four or five years at the expense of the quality of medicine. We have the most serious doubts that there is any way of making good medicine cheap and still keep it of a high calibre. Component societies must exercise care that the subject of medical economics, with its many phases, does not relegate to second place the scientific work of the Society.

Students of so-called medical economics are in agreement that there are radical differences between the economics involved in the delivery of scientific medical service by a qualified profession and the economics of a banking, commercial, financial world. Let us also appreciate that in this present-day world there is a great intermingling of our relationships with a far greater degree of dependency, each upon the other, than there was even fifty years ago. It is this fact that some overlook when they assume that they can take the problem revolving about the distribution of medical services from an economic viewpoint and solve it to the exclusion of such problems as poverty, taxation, legislation, centralized governments, and governmental bureaus.

We think we may safely assert that few, if any, who have asked for medical care during these depression years, have been turned from the door without it. We must grant that there have been many who should have asked for medical care and who did not. But let us not forget that this latter situation is no new problem, and that it existed most acutely, according to sociologists, when this country was going through its boom years.

The word "plan" has been used with such broad connotations in the immediate years passed that we must be careful to confine its meaning, when applied to the subject of medical care. In this field "plans" are means for bringing medical service to a larger number of people at a cost within their means to meet. Only incidentally do they refer to the

physician's income. Some physicians have conceived them to be a means of immediately restoring the specialist's income of 1928. That is not their intent and surely none that we have seen would do that for they refer to low-cost service and not high incomes.

It seems to us that we, who see this problem day by day and who try to study it in its broad phases and relationships, sense more keenly with each passing year that no small part of the so-called problem of the distribution of medical services must be solved not by laws but by education. People who run automobiles for pleasure, for example, assert financial inability to take advantage of health protective measures. Is this a problem for legislation or a problem for education?

This discussion is all designed to suggest that the House of Delegates of our American Medical Association at its Atlantic City session acted with great wisdom when they caused to be introduced into the Report of the Bureau of Medical Economics a separate and new section designed to acquaint those who were "planning plans" with the dangers they might well anticipate. We believe that warning is of sufficient importance to warrant this page and its reprinting herewith.

True medicine will never stagnate, but we must use exceptional care at this time to make certain that plans for further progress actually will operate to promote the public health.

"In designing and operating plans to provide medical care for the indigent and low income groups, county medical societies may well consider the dangerous, destructive and unethical tendencies which even the most carefully conceived and constructed plan may assume. Some of these may follow an incomplete or inaccurate preliminary estimate of the medical situation; some may result from the unpredictable factor of human nature; others may follow as the natural outcome of changes in the general economic conditions entirely beyond the control of the medical profession. Regardless of the causative factors, which may vary in different communities, county medical societies must be prepared to recognize and deal with complications affecting the organization of medical care under the specifications of a county plan just as their members are trained to deal with complications which often occur to change the course of the diseases which they treat. Some of these dangers and complications are:

"1. The adoption and operation of a medical plan where it is unnecessary.

"2. The stimulus aroused by good plans among irresponsible organizers to develop and operate imitations and counterfeits.

"3. The establishment in medical practice of dangerous patterns following the adoption of undesirable types of plans.

"4. The compromise of medical societies in the corporate practice of medicine or in the operation of insurance companies as a result of an insufficient study of state statutes and case law.

"5. Failure, in the operation of a plan, to conform to the Principles of Medical Ethics.

"6. The almost inevitable transition of voluntary insurance plans into compulsory contributory sickness insurance systems operated by the state.

"7. The difficulties involved in or the failure adequately to provide for complete control of medical affairs by the medical profession.

"8. The 'freezing' of medical fees at a point below that which is consistent with good medical service.

"9. Failure to bear constantly in mind that a medical society plan is an experiment in the methods of distributing medical service and that it may have only a temporary usefulness, may need frequent or drastic modifications or may need to be discarded entirely.

"10. Medical society plans must not be considered or accepted as a substitute for the regular practice of medicine as applied to the majority of people. If it is believed such plans may be useful, they should be considered merely as supplementary facilities in the distribution of medical service. They should be used only so long and in such a manner as they serve efficiently to make more easily available to low income groups a high quality of medical care."

George Crownhart

Secretary.

J. O'Leary

President.

SOCIETY PROCEEDINGS

CLARK

A meeting of the Clark County Medical Society was held at Neillsville on June 21st. After the dinner at the Merchant's Hotel, papers were presented by Dr. M. C. Rosekrans, Neillsville, on the rowing method of artificial respiration and by Dr. S. E. Williams of Chippewa Falls on anesthesia, its different methods and advantages. A.H.K.

FIFTH DISTRICT

A meeting of county medical societies comprising the Fifth District was held on July 18th at the Association of Commerce rooms, Security National Bank building, Sheboygan. The afternoon program consisted of the following papers:

"Some Medical Aspects of Thyroid Disease" by Dr. S. W. Haines, Mayo Clinic, Rochester.

"The Diagnostic and Therapeutic Problems of the Menopause" by Dr. E. L. Sevringhaus, Madison.

"Coronary Sclerosis" by Dr. A. R. Barnes, Mayo Clinic, Rochester.

"Certain Orthopedic Conditions of Interest to the General Practitioner"—with lantern slides, by Dr. R. M. Carter, Green Bay.

Dr. Gilbert E. Seaman, Superintendent of Winnebago State Hospital for Insane, was the evening speaker, his subject being "Some Problems in the Care of the Mentally Ill".

Dr. H. M. Lynch, West Bend, was elected president of the Fifth District Medical Society and Dr. A. C. Radloff of Plymouth was re-elected secretary.

The annual meeting of this Society will be held next year at Cedar Lake in Washington County.

MILWAUKEE NEURO-PSYCHIATRIC

The annual meeting of the Milwaukee Neuro-Psychiatric Society was held on Thursday, June 27th, at the University Club, Milwaukee.

THE WOMAN'S AUXILIARY

Mrs. Rock Sleyster, 1220 Dewey Ave., Wauwatosa, *President*
Mrs. F. Gregory Connell, 420 Washington Blvd., Oshkosh, *President-elect*
Mrs. George H. Ewell, 2024 Kendall Ave., Madison, *Secretary*
Mrs. Donne F. Gosin, 631 S. Quincy Ave., Green Bay, *Treasurer*
Mrs. Rogers N. Herbert, Nashville, Tenn., *National President*

From the Hostess Auxiliary

REMEMBER the dates—September 17, 18, 19, 20. Doctors' wives, throughout the state, avail yourselves of the opportunity to be accredited with increasing the attendance for the 94th anniversary meeting of the State Medical Society of Wisconsin in Milwaukee. This can be accomplished by inducing your husband to spend a few days at the convention to avail himself of the opportunities offered at this meeting. Accompany him so that his stay will be a pleasant one, and that you may enjoy the activities and functions offered by the Milwaukee County Auxiliary.

May it be known that every county auxiliary member is also an active member of the state and national auxiliaries, and has the privilege of attending the general business meetings on Wednesday and Thursday. Wives, mothers, daughters, and sisters of doctors of medicine attending this convention, whether they are members of the Auxiliary or not, are invited and will be welcome at all functions.

Auxiliary members are doing everything in their power to make your visit one of interest. Again, urge your husband to attend the State Medical Society meeting, and if not successful, come without him and gain inspirations in auxiliary work.

Mrs. Louis M. Warfield, General Chairman, her able committees, and members of the Milwaukee County Auxiliary have tried to plan a program to suit the fancies of every visitor. A pleasant and most cordial welcome awaits you.—MRS. HARRY J. HEEB.

Plans Announced for Seventh Annual Meeting of Auxiliary at Milwaukee

THE Seventh Annual Meeting of the State Auxiliary will be held in Milwaukee at the same time as the Annual Meeting of the State Medical Society, Sept. 17–20. The headquarters for the Auxiliary will be at the Schroeder Hotel.

Plans and arrangements by the Hostess Auxiliary, Milwaukee County, are well under way for the entertainment of members and guests. Mrs. Louis Warfield, Chairman of the Annual Meeting, and Mrs. Harry J. Heeb, President of the Woman's Auxiliary to the Medical Society of Milwaukee County, and committee chairmen are arranging entertainment which promises many delights.

Those who attended the state meetings in Milwaukee in 1930 and 1932, and again in 1933 in connection with the National Auxiliary Convention, know that the members of Milwaukee Auxiliary will, undoubtedly, make this another memorable meeting.

Every woman attending the Convention of the State Society with her husband is cordially invited to all the meetings of the Auxiliary, whether now a member or not.

MRS. ROBERT E. FITZGERALD, Wauwatosa, President-Elect, Woman's Auxiliary to the American Medical Association

WOMAN'S AUXILIARY
To The
STATE MEDICAL SOCIETY OF WISCONSIN
Milwaukee
Sept. 17–20. 1935
Headquarters: Hotel Schroeder, Milwaukee
Registration—Lobby floor

PRELIMINARY PROGRAM

Tuesday, Sept. 17, 1935

P.M.

6:30 Executive Board dinner—Banquet Room, 5th floor, Schroeder Hotel.
Address by Mrs. Robert E. Fitzgerald, National President-Elect.
Address by Mrs. Eben J. Carey, National Treasurer.
Music by members of Milwaukee's International Opera Chorus.
Executive Board meeting following the dinner. Mrs. Rock Sleyster, presiding.

Wednesday, Sept. 18, 1935

A. M.

10:00 General Meeting—Banquet Room, 5th floor, Schroeder Hotel. Mrs. Rock Sleyster, presiding.
Address of Welcome—Mrs. Harry J. Heeb, Milwaukee.
Response—Mrs. Arthur J. McCarey, Green Bay.

P.M.

1:00 Luncheon—Main dining room—Lobby floor—Schroeder Hotel.
Orchestral program and Style Show.

3:00 Tour of City
or
Trips to: 1. Museum, 2. Convalescent Home for Children, 3. Junior League Curative Workshop, 4. County Institutions.

MRS. EBEN J. CAREY, Milwaukee,
Treasurer, Woman's Auxiliary to the
American Medical Association

Thursday, Sept. 19, 1935

A. M.

10:00 General Meeting—Banquet Room, 5th floor, Schroeder Hotel. Mrs. Rock Sleyster, presiding.
Speaker—Dr. E. H. Cary, Dallas, Texas.

P.M.

1:00 Luncheon and Bridge party—Wisconsin Club. Both auction and contract will be played. There will be table and door prizes.

3:30 Post-Convention Board Meeting—Banquet Room, Schroeder Hotel. Mrs. F. Gregory Connell, presiding.

6:45 Annual Dinner and Dance—Crystal Ballroom, 5th floor, Schroeder Hotel.

ANNUAL MEETING COMMITTEES

General Chairman ---------Mrs. Louis M. Warfield
Vice-Chairman ----------Mrs. Julius H. Sure
Greetings ----------Mrs. Francis Janney

Committee Chairmen:

Headquarters—
Mrs. Arthur Grob
Mrs. William Liefert

THE CHAIRMAN'S MESSAGE

The Auxiliary to the Medical Society of Milwaukee County extends greetings to the wives of the physicians of Wisconsin and hopes they will join us in Milwaukee for the State Meeting, September 17–20.

Will members and organizations notify *Mrs. Francis Janney, 1761 Church Street, Wauwatosa*, by September 10th if they are coming to the convention, and where they will stay so that we can make preparations for their entertainment.—MRS. LOUIS M. WARFIELD, *General Chairman*, 2537 N. Farwell Avenue, Milwaukee.

Convention Hall—
Mrs. H. O. Zurheide
Mrs. Otto H. Foerster

Registration—
Mrs. Oscar W. Friske, Beloit
Mrs. Raymond Schowalter
Mrs. John J. O'Hara

Hospitality—
Mrs. Harold J. Cannon
Mrs. Robert G. Washburn

Golf—
Mrs. G. I. Hogue

Bridge—
Mrs. J. Gurney Taylor

Style Show—
Mrs. Fredk. C. Heidner

Information—
Mrs. Arno R. Langjahr
Mrs. Thos. A. Judge

Transportation—
Mrs. Harry M. Hawkins
Mrs. Robert McDonald

Tickets—
Mrs. Wm. M. Jermain
Mrs. Edwin P. Bickler

Publicity—
Mrs. John Foster McNary
Mrs. Norbert Enzer

Exhibits—
Mrs. Henry Gramling
Mrs. C. A. Harper, Madison

Flowers—
Mrs. Roland Frederick
Mrs. Wilson W. Hume

Dr. Cary, Dallas, Texas, Will Address Auxiliary

DR. E. H. CARY, Dean of Baylor University College of Medicine, Dallas, Texas, former President of the American Medical

Association, and now Chairman of the Committee on Legislative Activities of the Association, is to be the speaker at the General Meeting of the Auxiliary on Thursday morning, September 19th.

Dean Cary also will be the speaker of the evening on the occasion of the annual dinner in the Crystal Ballroom of the Schroeder Hotel, Thursday evening, September 19th.

Nineteenth Auxiliary Organized

THE Executive Board of the Woman's Auxiliary to the State Medical Society of Wisconsin are happy to announce the organization of an Auxiliary to the Grant County Medical Society, July 25, 1935.

We are greatly indebted to Dr. Mina B. Glasier, the Secretary of Grant County Medical Society, who personally called each doctor's wife in the County and asked her to attend the organization meeting which was held at one o'clock in the Wright Hotel at Lancaster. We are deeply grateful to Dr. Glasier for her efforts and wish to express our sincere appreciation to her.

Twenty-one were present at this meeting including Dr. Mina B. Glasier of Bloomington, Mrs. Robert E. Fitzgerald and Mrs. Eben J. Carey of Milwaukee.

This new auxiliary will be represented at the Annual Meeting in September by its delegate Mrs. H. J. McLaughlin of Bloomington and alternate, Mrs. Ernest C. Howell of Fennimore.

Its officers are: Mrs. Guerdon C. Buck, Platteville, President; Mrs. J. C. Doolittle, Lancaster, Vice-president; Mrs. Mark A. Bailey, Fennimore, Secretary; and Mrs. F. H. Baldwin, Bloomington, Treasurer.—HELENE M. CAREY (MRS. EBEN J.) *Organization Chairman.*

Annual Meeting Delegates*

County	Delegate	Alternate
Brown–Kewaunee–Door	*Mrs. John R. Minahan*, Green Bay Mrs. Dana B. Dana Kewaunee	Mrs. F. L. Crikelair, Green Bay Mrs. G. F. Goggins, De Pere
Columbia		
Dane	*Mrs. Arthur Sullivan*, Madison Mrs. Homer Carter, Madison	Mrs. Eugene Sullivan, Madison Mrs. George Ewell, Madison
Dodge	*Mrs. Clarence M. O'Hora*, Beaver Dam Mrs. E. P. Webb, Beaver Dam	---------- Mrs. Fay T. Clark, Waupun
Douglas	*Mrs. Thos. J. O'Leary*, Superior Mrs. Herbert J. Orchard, Superior	---------- ----------
Grant	*Mrs. Guerdon C. Buck*, Platteville Mrs. H. J. McLaughlin, Bloomington	---------- Mrs. Ernest C. Howell, Fennimore
Green Lake–Waushara–Adams	*Mrs. Stephan L. Casper*, Berlin Mrs. Gustav Mueller, Princeton	Mrs. Paul Eisele, Ripon Mrs. A. J. Wiesender, Berlin

County	Delegate	Alternate
Kenosha	*Mrs. Charles F. Ulrich*, Kenosha Mrs. A. F. Ruffalo, Kenosha	Miss Nora Belle Binnie, Kenosha Mrs. E. F. Swarthout, Kenosha
Manitowoc	*Mrs. Alfred P. Zlatnik*, Two Rivers Mrs. M. P. Andrews, Manitowoc	Mrs. Wm. E. Donohue, Manitowoc Mrs. F. E. Turgasen, Manitowoc
Marinette–Florence	*Mrs. A. T. Nadeau*, Marinette Mrs. James V. May, Marinette	---------- Mrs. H. L. Jorgenson, Marinette
Milwaukee	*Mrs. Harry J. Heeb*, Mrs. Earl L. Baum Mrs. Norbert Enzer Mrs. Elmer H. Gramling Mrs. John J. McGovern Mrs. Clyde W. Morter Mrs. Wm. J. Scollard Mrs. Chas. H. Stoddard	Mrs. Fredk. C. Heidner Mrs. Joseph J. Adamkiewicz Mrs. Edward F. Barta Mrs. Henry J. Kuhn Mrs. Simpson M. Markson Mrs. John McCabe Mrs. Henry J. Olson Mrs. Wm. H. Washburn
Outagamie	*Mrs. Earle F. McGrath*, Appleton Mrs. Albert E. Rector, Appleton	Mrs. John J. Laird, Black Creek Mrs. Albert B. Leigh, Kaukauna
Polk	*Mrs. Raymond G. Arveson*, Frederic Mrs. Anton Nelson, Clear Lake	Mrs. Geo. B. Noyes, Centuria Mrs. James Nicholson, Milltown
Portage	*Mrs. Wayne F. Cowan*, Stevens Point Mrs. Harold Coon, Stevens Point	---------- ----------
Racine	*Mrs. Frank W. Pope*, Racine Mrs. C. C. Atherton, Union Grove	Mrs. Fredk. C. Christensen, Racine Mrs. Carl O. Schaefer, Racine
Rock	*Mrs. Thos. F. Shinnick*, Beloit Mrs. F. E. Brinckerhoff, Beloit	Mrs. Stanley Metcalf, Janesville Mrs. Harry E. Kasten, Beloit
Sheboygan	*Mrs. R. C. Meyer*, Plymouth Mrs. Wm. H. Neumann, Sheboygan	Mrs. Clarence C. Stein, Kohler Mrs. Alfred C. Radloff, Plymouth
Waukesha	*Miss Hertha C. Voje*, Oconomowoc Mrs. Henry A. Peters, Oconomowoc	Mrs. Wm. H. Oatway, Waukesha Mrs. Rollin D. Thompson Statesan
Winnebago	*Mrs. Henry A. Romberg*, Oshkosh Mrs. T. Dewey Smith, Neenah	Mrs. L. E. Dickelman, Oshkosh Mrs. Geo. E. Forkin, Menasha

* Names in italics are County Presidents.

News Items and Personals

Dr. J. D. Fuller of Brownsville has sold his practice to Dr. Michael F. Ries of Lomira. Dr. Fuller is taking postgraduate work at the Cook County Hospital, Chicago, after which he will become associated with his brother, Dr. M. H. Fuller of Green Bay.

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Dr. A. H. Heidner of West Bend, former Councilor of the State Society, and Mrs. Heidner joined the tour of the Pan-American Medical Association at New York on June 29th. Scientific meetings were held aboard ship while clinics were conducted at Rio de Janeiro and Sao Paulo, Brazil. They returned early in August.

—△—

Dr. Frank J. Naylen, formerly of Fond du Lac, on July first became associated with The Hansen Clinic, 511 W. Second Street, Stevens Point.

—△—

Dr. and Mrs. Adolf Wallner of Watertown and their daughter have returned from their European trip.

—△—

Dr. and Mrs. J. S. Ackerman of Cudahy sailed the latter part of July for a trip abroad.

—△—

The following physicians have recently opened offices in the state:

Dr. Harold H. Fechtner, who has been resident physician at Wisconsin General Hospital, Madison, for the past two years, has opened offices formerly occupied by the late Dr. Harold M. Akey in Merrill.

Dr. Valentine C. Kremser, a graduate of Marquette in 1933 and who has since been on the staff of Milwaukee County General Hospital, has opened an office at Fox Lake, Wis.

Dr. E. L. Bernhart, formerly of Milwaukee, has taken over the offices of the late Dr. W. M. Urkart of West Bend.

Dr. John A. Beoher of Reedsburg and Dr. James J. Clark of Janesville, who were licensed in this state in January, have opened joint offices in the Daly residence at Reedsburg.

—△—

Dr. W. H. Oatway, Jr., who has been with the Trudeau Foundation at Saranac Lake, New York, and Shelton, Connecticut, has been appointed as assistant in medicine at the University of Wisconsin Medical School and began his duties on July 15th.

—△—

A meeting of Wisconsin sanatoria medical directors was held at Sunnyview Sanatorium, Oshkosh, on July 13th. Speakers were:

Dr. Hoyt E. Dearholt, Milwaukee, who gave a report on the national association meeting; Dr. H. H. Christensen of Wausau who discussed a paper on "Pneumolysis"; Dr. A. A. Pleyte, Milwaukee, who presented a paper on "Studies of the Blood Picture in Tuberculosis" and Dr. T. J. Snodgrass of Janesville, who read a paper on "Procedures in Thoracic Surgery".

—△—

A testimonial program honoring Dr. J. S. Hess, Sr., of Mauston was held at the Court House Park at Mauston on Sunday, July 21st. The program included speeches, musical selections, and singing. Dr. Hess recently retired after forty-two years of practice in Mauston and this program was arranged as a tribute to him for his years of service to the Mauston community.

Dr. Hess was presented with a silver placque.

His work at the Mauston Hospital will be continued by his son, Dr. J. S. Hess, Jr., and Dr. Howard Christensen.

RADIO PROGRAM

During the summer months the radio health talks of the State Medical Society are presented at 9:30 A.M. each Tuesday, Wednesday and Thursday. These talks are broadcast over the State-Owned Radio Stations,—WHA, Madison, and WLBL, Stevens Point. The schedule for the next month follows:

August 13—Dog Days
August 14—Do You Know?
August 15—Hot Weather Suggestions
August 20—Emergency Aid
August 21—Emergency Aid (continued)
August 22—Traveling With Baby
August 27—Do You Know?
August 28—The Common Drinking Cup
August 29—"Autocides"
Sept. 3—Ready for School Again
Sept. 4—Do You Know?
Sept. 5—A Sound Mind in a Sound Body
Sept. 10—Rewards and Punishments
Sept. 11—Do You Know?
Sept. 12—The Health of the Mother

MARRIAGES

Dr. B. I. Pippin, Richland Center, to Miss Mildred Forseth of La Crosse on June 30th at Nashua, Iowa. They left immediately on a month's trip to the Pacific Coast.

Dr. William C. Wojta, Fond du Lac, to Miss Audrey LeClaire also of Fond du Lac on June 25th. After a trip to New York City and Washington, D. C., they will live in Fond du Lac.

Dr. Richard J. Dietz, Milwaukee, to Miss Evelyn A. Tobin, also of Milwaukee, on July 27th at Milwaukee.

The marriage of Miss Virginia Carter, daughter of Dr. and Mrs. Ralph M. Carter of Green Bay to Calvin A. Elwood of Chicago and Menominee, Michigan, took place on July 27th.

DEATHS

Dr. L. H. Pelton, Waupaca, President of the State Medical Society in 1906, died on June 28th after an illness of fifteen months.

Dr. Pelton was born on July 10, 1848, in the town of Linden, Sheboygan County. The first sixteen years of his life were spent on his father's farm. He attended country school and then finished a high school course at Plymouth. He taught country school for three terms, then received appointment to West Point but had to resign because of ill health. Some time after that he studied medicine at Plymouth under Dr. W. D. Morehouse. In the winter of 1871 he entered Rush Medical College and when the College was destroyed by fire that year, completed his studies at Bellevue Hospital Medical College, New York, graduating in 1873.

Returning to Wisconsin, he practiced medicine first at St. Cloud, Fond du Lac County. From there he moved to Waldo in Sheboygan County in 1876 and six years later, in 1882, he moved to Sheboygan Falls. In the spring of 1885 he made his permanent location at Waupaca. Since 1912 he had not been in active practice because of failing sight.

Besides serving as President of the State Society, he held offices in other societies. For two years he was President of the Ninth Councilor District Medical Society and two years President of Waupaca County Medical Society. He was also health commissioner and city physician at Waupaca for ten years.

Since the death of Mrs. Pelton in 1932, he had made his home with his son, John, at Waupaca.

Dr. Pelton was an honorary member of the Waupaca County Medical Society, the State Medical Society, and the American Medical Association.

SOCIETY RECORDS

New Members

P. K. Edwards, Barron.
W. A. Olson, Greenwood.
R. J. Dietz, 3803 W. Center St., Milwaukee.
C. H. Nichols, 2105 N. Prospect Ave., Milwaukee.
R. M. Waldkirch, Wayside.
V. D. Crone, Beloit.
H. W. Christensen, Mauston.
R. A. Buckley, Durand.
E. L. Martineau, 324 E. Wis. Ave., Milwaukee.

Changes in Address

J. A. Thranow, Milwaukee to 6803 W. Wells St., Wauwatosa.

L. M. Woodford, Brule to Washburn.

Frank J. Naylen, Fond du Lac to 511 N. Second St., Stevens Point.

MEDICAL ECONOMICS

THE MILBANK MEMORIAL FUND

By this time all our members are aware that Mr. John S. Kingsbury, advocate of compulsory sickness insurance and Secretary of the Milbank Memorial Fund, is no longer with the Fund.

When the President's Committee on Economic Security selected its Medical Advisory Committee last fall, we repeatedly declared that the members of that Advisory Committee as a whole could not be said to represent the medical profession of the United States. Now comes the explanation. Writing under the title of "Economic Aspects of Distribution of Medical Care," the Milbank Memorial Fund Quarterly states as follows:

"In 1933, the Fund's staff began a series of studies on the economic aspects of the distribution of medical care after the Committee on the Costs of Medical Care completed its work and published its final report. These studies were continued in 1934, but were interrupted during the summer when Edgar Sydenstricker was invited by the President's Committee on Economic Security to undertake the investigations on 'Risks to Economic Security Arising Out of Ill Health.' The Fund acceded to the Committee's request. Among the measures contemplated by the Committee to lessen the risks arising out of ill health were insurance against wage loss due to disability and insurance against the costs of medical care. Mr. Sydenstricker therefore requested that Dr. I. S. Falk be permitted to aid him on this phase of the work. In addition to Dr. Falk, Mr. Sydenstricker assembled a staff of technical experts on various aspects of the general subject which included: The extension of public health services as a means of preventing ill health; the extension of public medical services for the better care of dependent persons and of persons affected with certain diseases of public interest; and the two forms of insurance already cited. A large part of Mr. Sydenstricker's and Dr. Falk's time was devoted to this task during the latter half of 1934.

"Immediately after receiving the assignment from the Committee on Economic Security, Mr. Sydenstricker recommended the appointment of a Medical

Advisory Board composed of leading physicians and surgeons in order that the point of view of medicine should be fully represented in the studies conducted for the committee. Mr. Sydenstricker's further recommendations for the appointment of advisory committees in the fields of public health, dentistry, hospital management, and nursing were also approved."

It is indeed of interest to note that it was Mr. Sydenstricker who requested that Dr. I. S. Falk (Ph. D.) be permitted to aid him and that it was Mr. Sydenstricker who recommended the appointment "of a medical advisory board composed of leading physicians and surgeons." From this we may very properly assume, we believe, that it was also Mr. Sydenstricker who selected the members of that board.

FAVORABLE POSITION

The relatively favorable position under which Wisconsin physicians practice their profession does not impress one particularly until the situations in other states are observed first-hand. Wisconsin had the first Basic Science Law (1925). Yet we think little about it until we read an editorial like that which appeared in the Journal of one of our neighboring states:

"There must eventually be a minimum standard of education for all who propose to treat the sick. Some states now have such laws, but the majority, including our own, have thus far failed in their enactment. We came closer to it than ever in the last session of the legislature and will finally succeed. Do not fail to talk Basic Science Law to your legislators from now on. Popularize this constructive and protective legislation in every possible way repeatedly. Remember it is the keynote of our legislative ambitions!"

COLLEGE OF SURGEONS

From time to time information comes to the office of the State Society that the American College of Surgeons is supporting the principle of sickness insurance. Because such reports are in error we quote herewith the comment of "Minnesota Medicine" on this identical subject:

"A change of policy regarding the solution of economic problems has been adopted by the Board of Directors of the American College of Surgeons," Dr. Cary announced to the House of Delegates of the American Medical Association at Atlantic City.

"As a result of the recent conference of representatives of the College of Surgeons and of the American Medical Association, the College announced that it would hereafter leave the solution of economic problems to organized medicine and its various branches and that it would in the future devote itself exclusively to the special problems to which it is dedicated."

REPORT THREATS

In the last several months we have observed the reports of physicians concerning malpractice cases, many of which begin by saying,—"I was first threatened about a year ago."

We direct the attention of all members to the fact that under the Medical Defense plan of this Society and under the terms of practically all malpractice insurance policies, it is incumbent upon them to report every threatened malpractice suit just as soon as any threat is made. Failure to do so sometimes vitiates the defense, for it fails to give the insurance carriers the opportunity to obtain early records and statements so essential to a successful defense.

Report to your insurance carrier and to the Medical Defense Fund of the Society immediately that you have any information that a patient is so dissatisfied that he or she has threatened to resort to legal action.

CONTRACT PRACTICE

At least two of the component county medical societies of this State have adopted new rules with reference to passing upon the ethics of contracts. Members in these societies are advised that ethical questions concerning contract practice can be solved in advance of the question being raised if members will submit proposed contracts to the Board of Censors of the Society.

"RESPONSIBLE HANDS"

"If the accounts you turn over for collection are worth anything they are at least worth being in responsible hands." This was the statement which came to our attention lately and which we wish heartily to endorse. Within the last two weeks your central office has received adverse reports on sixteen out-of-state agencies, all of whom have been soliciting collection accounts from Wisconsin physicians. Ask about your contract before you sign,—it costs but three cents.

"A VERY POOR MIXER"

In response to one of our recent legislative bulletins asking that physicians make known their thoughts on three important measures then pending, a member in a large city returned our bulletin with the following notation: "My Assemblyman (always loyal) says you are a very poor mixer. People who live in glass houses should not throw stones. Let's all do our best."

Normally anonymous communications receive no attention but we cannot pass over this one because it gives us the opportunity again to reaffirm our legislative policy many times previously reaffirmed by our House of Delegates.

The State Medical Society of Wisconsin has no entertainment lobby at Madison. It believes that measures affecting the public health should be passed or defeated on their merits alone and that worthy measures deserve the support of all legislators irrespective of their political affiliation.

We are conscious of the fact that there are lobbies in Madison that spend large sums of money each

session on entertainment. We do not conceive that to be in keeping with the type of legislative work which we are doing. We are most anxious that every physician acquaint his legislator with the merits or demerits, as he sees them, of any health legislation, hence our legislative bulletins. But we do not entertain and we do not solicit votes by an entertainment lobby.

Is our policy that the House of Delegates formulated correct? Read the report of our Committee on Public Policy in this issue of the Journal.

THE ENTERTAINMENT LOBBY

Since writing the above item, the Wisconsin State Journal of Madison has published an editorial on this subject matter.

"Entertainment of public officials remains the favorite avenue of approach by lobbyists trying to influence governmental actions. * * *"

"Wisconsin had its experience two years ago with the lobby of the small loans companies. *It is also well known that there is some entertaining of legislators by lobbyists this session.*

"The spirit of the Wisconsin anti-lobby law is that activities of legislative representatives shall be confined to appearances before legislative committees in public hearings on measures. The entertainment lobby is supposed to be banned. Members of the legislature should have sufficient respect for their offices to decline to be the guests of lobbyists. The same should be true of members of congress.

"The remedy, however, rests with the people. Public opinion should be so strong against the entertaining of lobbyists as to compel their banishment from all legislative halls."

RELIEF—NATIONAL DEBT

Statistics, generally speaking, are dry and uninteresting. The exception, however, is when the material contained in the statistics affects us personally. Physicians are affected personally by the costs of relief and grants-in-aid made to Wisconsin by the Federal Government. In the recent issue of the Congressional Record our attention was attracted to the statistics on relief costs in Wisconsin.

Wisconsin's share of the national debt, computed on a population basis, amounts to 650 million dollars, or $216.67 for each person living in Wisconsin. Now if we were to deduct from the population of Wisconsin the 430,000 persons on relief we would find that the Wisconsin per capita share of the national debt would be $260.00. The deduction of the relief population is only one section of the population that rightfully might be deducted.

It is interesting to note from the Congressional Record that the Federal Government received from Wisconsin during the fiscal year of 1934, forty three million dollars or 1.6% of the national receipts from internal revenue. Wisconsin, however, during the same period received from the Federal Government under all types of "cooperative arrangements" sixty-one million dollars or 3.4% of the payments made to all the states. In other words Wisconsin received eighteen million dollars more than we paid the Federal Government.

We also discovered some interesting material on Wisconsin's experience and costs under the Federal Relief Programs, that affect Wisconsin and you personally and which we have tried to arrange in an understandable manner so that it will "hit home".

During the fiscal year of 1934 sixty million dollars was spent by State and local relief administrations in Wisconsin. Over 73% of this money came from the Federal Government, 1.7% from state funds and 25% from local funds. The 25%, which was raised by local taxation, alone means a per capita cost of $6.00 per person. (The 430,000 on relief were deducted as they did not contribute to the funds). If the total cost, or sixty million, was taken on a per capita basis it would show that relief programs cost each resident of Wisconsin $24.00 to support.

Wisconsin was found to hold about a middle position in comparison with other states. There were 28 states receiving more than 73% of their relief funds from the Federal Government and 20 states receiving less than 73% from the Federal Government. Wisconsin's position when it came to the matter of local funds was found to be among the 12 states paying 25% or more of the relief costs from local money. There were 36 states paying less than 25% of their relief costs.

It will be interesting to see what the Government's fiscal year of 1935 will hold for us.

Chiropractic-Naturopathic Program Fails in Wisconsin Legislature

DESPITE one of the most intensive cult lobbies in the last twelve years, the Wisconsin Legislature has now killed all measures proposed to extend the licensing powers of the chiropractors and to license naturopaths.

The Assembly in July killed and then refused to revive the naturopathic bill. It had previously killed a bill exempting chiropractors from examinations by the Basic Science Board.

This action was rapidly followed later in

the month by the Senate, which body killed without discussion and without a roll call two chiropractic bills previously advanced by the Assembly. The first of these bills would have authorized chiropractors to treat injured workmen under the terms of the Workmen's Compensation Act while the second would have permitted chiropractors to use the title "Doctor of Chiropractic" and the initials "D.C."

When the Compensation Act measure was reached in the Senate on July 9th, a motion of adjournment by Senator Brunette of Green Bay was pending. Senator Carroll of Prairie du Chien asked that the motion be held in abeyance until the Senate could dispose of the two chiropractic bills. Senator Brunette assented to the request.

Senator Dempsey, Hartland, then moved that the chiropractic compensation act bill be killed. A viva-voce vote was taken and the bill was killed without a dissenting vote.

The next bill was that which provided that chiropractors might use the title "Doctor". Senator Clancy, Racine, moved the killing of this bill. Again a viva-voce vote literally "snowed under" the measure. Senator Sherman Wade of Antigo then moved that both measures be immediately messaged back to the Assembly so as to preclude any motion to revive the bills at this session. Senator Wade's motion was successful and within five minutes the Senate had thus killed the remaining cult bills without discussion and without even the necessity of roll calls.

Preliminary Program Announced for Ninety-Fourth Anniversary Meeting in Milwaukee Sept. 17-20

WITH the announcement of the preliminary program for the ninety-fourth anniversary meeting of the State Medical Society of Wisconsin to be held at the Auditorium, Milwaukee, September 17-20, but last-minute details remain in planning the September annual meeting.

This will be the first meeting of the Society in Milwaukee since the combined meeting with the American Medical Association in 1933 and an exceptionally large attendance, undoubtedly the largest in the history of the Society, is anticipated.

Distinguished speakers from without the state who are to appear on the ninety-fourth anniversary program include:

Dr. F. L. Knowles, Specialist in Orthopedic Surgery, Fort Dodge, Iowa.

Dr. A. Graeme Mitchell, B. K. Rachford Professor of Pediatrics, University of Cincinnati College of Medicine, Cincinnati, Ohio.

Dr. Arthur J. Patek, Jr., Assistant in Medicine, Harvard Medical School, Boston, Mass.

Dr. Aaron Arkin, Associate Professor of Medicine, Rush Medical College, Chicago, Ill.

Dr. U. V. Portmann, Head of Department of Roentgenology, Cleveland Clinic, Cleveland, Ohio.

Dr. Louis G. Herrmann, Assistant Professor of Surgery, University of Cincinnati, College of Medicine, Cincinnati, Ohio.

Dr. Ernest M. Hammes, Professor of Neurology and Psychiatry, University of Minnesota Medical School, St. Paul, Minn.

Dr. Henry W. Woltman, Professor of Neurology, University of Minnesota, Graduate School of Medicine, Minneapolis-Rochester.

Dr. Hugh Cabot, Professor of Surgery, University of Minnesota, Graduate School of Medicine, Rochester.

Dr. G. J. Thompson, Department of Urology, The Mayo Clinic, Rochester.

The downtown section of Milwaukee.

The Schroeder Hotel, headquarters for the 94th anniversary meeting. Sessions of the Auxiliary and House of Delegates will be held here.

Dr. Frederick A. Coller, Professor of Surgery and Head of Surgical Department, University of Michigan Medical School, Ann Arbor, Mich.

Dr. Simon Levin, Director of the Medical Service, Isle Royal Mine, Houghton, Mich.

Dr. Charles M. McKenna, Professor of Genitourinary Surgery, University of Illinois College of Medicine, Chicago.

Dr. Vernon C. David, Clinical Professor of Surgery, Rush Medical College, Chicago.

Dr. Fremont A. Chandler, Assistant Professor of Orthopedic Surgery, Northwestern University Medical School, Chicago.

Dr. Percival Bailey, Professor of Neurosurgery, School of Medicine of the Division of the Biological Sciences, University of Chicago, Chicago.

Dr. H. E. Robertson, Professor of Pathology, University of Minnesota, Graduate School of Medicine, Rochester.

Dr. Waltman Walters, Associate Professor of Surgery, University of Minnesota, Graduate School of Medicine, Rochester.

Dr. E. H. Cary, Dean of Baylor University College of Medicine, Dallas, Texas, former President of the American Medical Association, and now Chairman of the Committee on Legislative Activities of the Association, is to be the speaker of the evening on the occasion of the annual dinner in the Crystal Ballroom of the Schroeder Hotel, Thursday evening, September 19th. No one is more intimately acquainted with the legislative problems and social trends in the medical profession than Dean Cary and his address at the annual dinner will be a feature of the meeting. The dinner meeting will be preceded by Council Awards and following Dr. Cary's address, a dance orchestra will play for members and their wives.

With the exception of dry clinics at Milwaukee County Hospital and Milwaukee Children's Hospital from 8:00 to 10:15 on Wednesday morning, September 18th, all scientific sessions will be held at the Milwaukee Auditorium just two blocks north of the Schroeder Hotel, headquarters for the delegates and the Woman's Auxiliary. The annual smoker will be held on Wednesday evening at the Schroeder Hotel, preceded by an address by Dr. Louis G. Herrmann of Cincinnati.

The largest commercial-scientific exhibit in the history of the Society will fill Kilbourn and Walker Halls of the Auditorium. As an added feature of the meeting, one-half of Juneau Hall is to be devoted to a hobby ex-

The Milwaukee Auditorium where all scientific sessions will be held.

hibit planned by the Medical Society of Milwaukee County.

ENTERTAINMENT

Dr. J. E. Rueth, Milwaukee, is Chairman of the annual golf tournament. The state tournament will be played on the course of the Blue Mound Country Club on Tuesday, September 17th. Golf reservation blanks will be mailed all members late in August. A special program of entertainment has been arranged for members of the Auxiliary and for all visiting ladies. This program is to be found on the Woman's Auxiliary page of this issue of the Journal.

EXHIBITS

Commercial-technical exhibits at the meeting include those by:

Bard-Parker Company, Inc., Danbury, Conn.
Bilhuber-Knoll Corporation, Jersey City, N. J.
The Borden Company, New York, N. Y.
R. B. Davis Company, Hoboken, N. J.
The DeVilbiss Company, Toledo, Ohio.
General Electric X-Ray Corporation, Chicago, Ill.
Gerber Products Company, Fremont, Michigan.
Horlick's Malted Milk Corporation, Racine, Wis.
Hurley X-Ray Company, Milwaukee, Wis.
E. H. Karrer Company, Milwaukee, Wis.
Kellogg Company, Battle Creek, Mich.
Kremers-Urban Company, Milwaukee, Wis.
Lea & Febiger, Philadelphia, Pa.
McIntosh Electrical Corporation, Chicago, Ill.
Mead Johnson & Company, Evansville, Ind.
Medical Protective Company, Wheaton, Ill.
Mellin's Food Company, Boston, Mass.
Merck & Co., Inc., Rahway, N. J.
Philip Morris & Co. Ltd., New York, N. Y.
V. Mueller & Company, Chicago, Ill.
Petrolagar Laboratories, Chicago, Ill.
Roemer Drug Company, Milwaukee, Wis.
W. B. Saunders Company, Philadelphia, Pa.
Scanlan-Morris Company, Madison, Wis.
Sharp & Smith, Chicago, Ill.
United States Hospital Supply Co., Minneapolis, Minn.
U. S. Standard Products Co., Woodworth, Wis.

Annual Meeting Preliminary Program

WEDNESDAY, SEPTEMBER 18

8:00 A.M. Dry Clinics

1. Milwaukee County Hospital.
   Dr. O. R. Lillie, Milwaukee, Chairman.
   (Program to be announced in September issue)
2. Milwaukee Children's Hospital.
   Dr. S. J. Seeger, Milwaukee, Chairman.
   (Program to be announced in September issue)

All remaining scientific sessions will be held in Milwaukee Auditorium.

10:30-12:15 General Sessions

10:30 The Surgical Treatment of Delayed Ulnar Neuritis.
Dr. J. R. Regan, Milwaukee.

10:50 The Diagnosis and Treatment of Myasthenia Gravis.
Dr. M. O. Boudry, Fond du Lac.
Discussion five minutes.

11:20 Edema,—What Conditions Cause It? How Can It Be Treated?
Dr. L. M. Warfield, Milwaukee.
Discussion five minutes.

11:45 The Treatment of Fracture of the Neck of the Femur. Film Showing Author's Method of Treatment.
By Dr. F. L. Knowles, Fort Dodge, Ia.
Discussion.

1:30-5:00 P.M. General Sessions

1:30 Scarlet Fever Immunization Among Children.
Dr. R. P. Schowalter, Milwaukee.

1:50 The Use of Human Convalescent Serum in Infectious Diseases.
Dr. Maurice Hardgrove, Milwaukee.
Discussion ten minutes.

2:20 Some Further Studies on Non-Specific Factors Affecting the Tuberculin Reaction.
By Dr. A. Graeme Mitchell, B. K. Rachford Professor of Pediatrics, University of Cincinnati College of Medicine, Cincinnati, Ohio.
Discussion ten minutes.
Intermission fifteen minutes for viewing exhibits.

3:15 Present-Day Concepts in the Treatment of Anemia.
Dr. Arthur J. Patek, Jr., Assistant in Medicine, Harvard Medical School, Boston, Mass.

3:35 Tumors of the Lung and Their Differential Diagnosis.
Dr. Aaron Arkin, Chicago, Ill.

4:00 Factors Which Influence the Curability of Mammary Cancer.
Dr. U. V. Portmann, Head of Department of Roentgenology, Cleveland Clinic, Cleveland, Ohio.
Discussion ten minutes.

4:40 The Treatment of Acute Suppurative Pleurisy.
Motion Picture Film.
Dr. Joseph W. Gale, Madison.

8:30-9:15 Evening Session—Schroeder Hotel

8:30 The Treatment of Peripheral Vascular Diseases.
Dr. Louis G. Herrmann, Assistant Professor of Surgery, University of Cincinnati, College of Medicine, Cincinnati, Ohio.
Discussion.

9:30 Smoker—Schroeder Hotel

THURSDAY, SEPTEMBER 19

8:20-10:00 A. M. General Sessions

8:20 The Treatment of Acute Empyema.
Dr. Joseph M. King, Milwaukee.

8:40 Some Problems Relating to the Care of the Insane in Wisconsin.
Dr. Gilbert E. Seaman, Winnebago.

9:00 Spinal Cord Injuries.
Dr. Ernest M. Hammes, Professor of Neurology and Psychiatry, University of Minnesota Medical School, St. Paul.
Discussion five minutes.

9:35 Some Neurologic Postoperative Complications.
Dr. Henry W. Woltman, Professor of Neurology, University of Minnesota, Graduate School of Medicine, Minneapolis-Rochester.
Intermission fifteen minutes to view exhibits.

10:15-12:15 Sectional Meetings

Section on Obstetrics and Gynecology. Dr. Roland S. Cron, Milwaukee, Chairman.
Presentations by Dr. R. L. Cowles, Green Bay; Dr. R. M. Kurten, Racine; Dr. R. W. Roethke, Milwaukee; Dr. H. W. Shutter, Milwaukee.
(Subjects to be announced in September issue).

Section on Urology. Dr. Walter M. Kearns, Milwaukee, Chairman.
Presentations by Dr. W. G. Sexton, Marshfield; Dr. H. E. Kasten, Beloit; Dr. Hugh Cabot and Dr. G. J. Thompson of Rochester, Minnesota; Dr. H. M. Stang, Eau Claire; Dr. H. G. Ewell and Dr. J. Newton Sisk, Madison.

Section on Medicine. Dr. W. M. Jermain, Milwaukee, Chairman.
Presentations by Dr. Otho A. Fiedler, Sheboygan; Dr. L. V. Sprague, Madison; Dr. C. H. Christiansen, Superior, and others to be announced in the September issue.

Section on Radiology. Dr. J. E. Habbe, Milwaukee, Chairman.
This meeting will be a round table discussion. Program will be announced in the September number.

1:30-5:00 P. M. General Sessions

1:30 Presidential Address.
Dr. Ralph M. Carter, Green Bay.

2:00 Announcements by Secretary.

2:05 Reconstructive and Plastic Surgery Relating to Injuries of the Mouth, Jaws, and Face.
Dr. M. N. Federspiel, Milwaukee.

2:30 Water Balance of Sick Patients.
Dr. Frederick A. Coller, Professor of Surgery and head of Surgical Department, University of Michigan Medical School.
Discussion ten minues.
Intermission ten minutes.

3:20 A Preliminary Report of the Committee on the Prevention of Goiter in the Children of Wisconsin.
Dr. Arnold S. Jackson, Madison.

3:40 Dangers and Their Prevention in the Operative Treatment of Goiters.
Dr. Simon Levin, Director of the Medical Service, Isle Royal Mine, Houghton, Mich.
Discussion ten minutes on above two papers.

4:20 Symptoms Following Cholecystectomy.
Dr. W. J. Tucker, Ashland.
Discussion five minutes.

4:45 Has the Pendulum Swung Too Far in the Conservative Treatment of the Ruptured Appendix?
Dr. C. W. Eberbach, Milwaukee.

6:45 Annual Dinner, Schroeder Hotel. Council Awards. Address, Dr. E. H. Cary, Dallas, Texas, Chairman, Committee on Legislative Activities, American Medical Association. Dancing.

FRIDAY, SEPTEMBER 20

8:20-12:00 A. M. General Sessions

8:20 Clinical Experiences with Ultra Short Wave Therapy.
Dr. W. J. Egan, Milwaukee.

8:40 The Operative Technique for Cryptorchidism. Motion Picture Demonstration.
Dr. Charles M. McKenna, Professor of Genitourinary Surgery, University of Illinois College of Medicine, Chicago.
Discussion ten minutes.

9:20 Paper to be read by Dr. Eben J. Carey, Dean, Marquette University School of Medicine, Milwaukee.
Intermission twenty minutes.

10:10 *Symposium on Tuberculosis.*
Presentations by Drs. R. H. Stiehm, Madison; Dr. K. L. Puestow, Madison; Dr. H. E. Dearholt, Milwaukee. (Subjects to be announced in September issue).

Symposium on Silicosis.
Presentations by Dr. O. A. Sander, Milwaukee; Dr. Norbert Enzer, Milwaukee, and others to be announced in the September number.

Symposium on Carcinoma of Rectum and Rectosigmoid.
Dr. F. B. McMahon, Milwaukee, Chairman.

The Pathology of Carcinoma of the Rectum and Rectosigmoid.
Dr. Garner Scullard, Eau Claire.

The Diagnosis of Carcinoma of the Rectum and Rectosigmoid.
Dr. A. G. Schutte, Milwaukee.

The Surgical Aspects of Carcinoma of the Rectum and Rectosigmoid.
Dr. Vernon C. David, Clinical Professor of Surgery, Rush Medical College, Chicago.

1:30-5:00 P. M. General Sessions

1:30 Pathological Conditions of the Female Urethra.
Dr. Cyril G. Richards, Kenosha.

1:50 Aseptic Necrosis of the Head of the Femur.
Dr. Fremont A. Chandler, Assistant Professor of Orthopedic Surgery, Northwestern University Medical School, Chicago.
Discussion five minutes.

2:15 The Present Trend of Conservative Treatment in Urological Problems for the General Practitioner and Surgeon.
Dr. W. E. Bannen, La Crosse.

2:35 Peculiarities of Intracranial Tumors in Childhood.
Dr. Percival Bailey, Professor of Neurosurgery, School of Medicine of the Division of the Biological Sciences, University of Chicago, Chicago.

3:05 The Value of Postmortem Examinations to the Practice of Medicine.
Dr. H. E. Robertson, Professor of Pathology, University of Minnesota, Graduate School of Medicine, Rochester.

3:35 The Various Operative Procedures Indicated in the Treatment of Peptic Ulcer.
Dr. Waltman Walters, Associate Professor of Surgery, University of Minnesota, Graduate School of Medicine, Rochester.

Members—1935 House of Delegates

County	*Delegate*	*Alternate*
Ashland-Bayfield-Iron	C. J. Smiles, Ashland	R. O. Grigsby, Ashland
Barron-Washburn-Sawyer-Burnett	A. S. White, Rice Lake	H. H. Schlomovitz, Barron
Brown-Kewaunee-Door	P. R. Minahan, Green Bay	W. M. Wochos, Kewaunee
Calumet	J. W. Goggins, Chilton	N. J. Knauf, Chilton
Chippewa	W. C. Henske, Chippewa Falls	C. T. Clauson, Bloomer
Clark	H. H. Christofferson, Colby	M. C. Rosekrans, Neillsville
Columbia	C. W. Henney, Portage	H. M. Caldwell, Columbus
Crawford	J. M. Sullivan, Prairie du Chien	E. T. Ackerman, Gays Mills
Dane	H. E. Marsh, Madison	W. T. Lindsay, Madison
	E. F. Schneiders, Madison	L. V. Sprague, Madison
Dodge	A. W. Hammond, Beaver Dam	R. R. Roberts, Beaver Dam
Douglas	C. W. Giesen, Superior	C. H. Christiansen, Superior
Eau Claire-Dunn-Pepin	F. E. Butler, Menomonie	R. N. Leasum, Osseo
Fond du Lac	D. J. Twohig, Fond du Lac	C. W. Leonard, Fond du Lac
Forest	E. G. Ovitz, Laona	G. W. Ison, Crandon
Grant	E. C. Howell, Fennimore	J. E. Donnell, Cuba City
Green	J. F. Mauermann, Monroe	W. G. Bear, Monroe
Green Lake-Waushara-Adams	A. J. Wiesender, Berlin	G. E. Baldwin, Green Lake
Iowa	M. T. Erickson, Highland	H. M. Walker, Dodgeville
Jefferson	H. P. Bowen, Watertown	W. S. Waite, Watertown
Juneau	Brand Starnes, New Lisbon	Carl C. Vogel, Elroy
Kenosha	A. F. Ruffolo, Kenosha	W. C. Stewart, Kenosha
La Crosse	N. P. Anderson, La Crosse	G. Gundersen. La Crosse
Lafayette	W. B. Williams, Argyle	R. B. Quinn, Darlington
Langlade	J. C. Wright, Antigo	L. A. Steffen, Antigo
Lincoln	H. G. Hinckley, Merrill	R. J. Henderson, Tomahawk
Manitowoc	R. W. Hammond, Manitowoc	L. W. Gregory, Manitowoc
Marathon	S. M. B. Smith, Wausau	E. E. Flemming, Wausau
Marinette-Florence	T. J. Redelings, Marinette	H. L. Jorgenson, Marinette
Milwaukee	Millard Tufts	W. A. Ryan
	N. E. McBeath	S. M. Markson
	L. W. Hipke	E. H. Gramling
	Charles Fidler	E. O. Gertenbach
	R. A. Toepfer, West Allis	W. F. Grotjan
	U. A. Schlueter	P. E. Oberbreckling
	W. M. Jermain	T. S. O'Malley
	Jos. Lettenberger	F. E. Drew
	F. D. Murphy	W. V. Nelson
	J. C. Sargent	R. E. Fitzgerald
	H. W. Powers	H. C. Schumm
	H. J. Gramling	A. R. Langjahr
	G. W. Neilson	Edward Jackson
Monroe	H. Vander Kamp, Tomah	C. H. Cremer, Cashton
Oconto	G. W. Krahn, Oconto Falls	J. S. Dougherty, Suring
Oneida-Vilas	W. S. Bump, Rhinelander	O. R. McMurry, Eagle River
Outagamie	A. E. Rector, Appleton	Albert B. Leigh, Kaukauna
Pierce-St. Croix	A. E. McMahon, Glenwood City	O. H. Epley, New Richmond
Polk	R. G. Arverson, Frederic	A. N. Nelson, Clear Lake
Portage	E. E. Kidder, Stevens Point	F. A. Marrs, Stevens Point
Price-Taylor	J. D. Leahy, Park Falls	E. B. Elvis, Medford
Racine	H. B. Keland, Racine	T. C. Hemmingsen, Racine
Richland	B. I. Pippin, Richland Center	George Parke, Viola
Rock	P. A. Fox, Beloit	W. J. Allen, Beloit
Rusk	W. F. O'Connor, Ladysmith	J. C. Baker, Hawkins
Sauk	Edward McGrath, Baraboo	H. J. Irwin, Baraboo
Shawano	A. J. Gates, Tigerton	L. W. Peterson. Shawano
Sheboygan	A. C. Radloff, Plymouth	A. J. Knauf, Sheboygan
Trempealeau-Jackson-Buffalo	J. Paul Reinhardt, Fountain City	R. L. MacCornack, Whitehall
Vernon	A. L. Myrick, DeSoto	P. H. Hansberry, Hillsboro
Walworth	S. G. Meany, East Troy	H. J. Kenney, Delavan
Washington-Ozaukee	J. G. Hoffmann, Hartford	H. M. Lynch, West Bend
Waukesha	H. A. Peters, Oconomowoc	H. T. Barnes, Delafield
Waupaca	J. W. Monsted, New London	Sam Salan, Waupaca
Winnebago	R. B. Rogers, Neenah	M. N. Pitz, Neenah
Wood	F. X. Pomainville, Wisconsin Rapids	K. H. Doege, Marshfield

Reports of Officers and Committees

CHAIRMAN OF COUNCIL

To the 1935 House of Delegates:

It was but comparatively few years ago that the position and office of Councilor was largely an honor to be conferred upon a fellow member who was outstanding in the district in which he resided. With the passing of each succeeding year since our Society has employed a full time Secretary, the office of Councilor has become one of steadily increasing responsibilities. In the past year each member of your Council has received more than 300 long mimeographed pages of material from the Secretary's office. This material was forwarded to provide each Councilor with a background to important and pending questions affecting the whole future of the practice of medicine and the public health in our state. And repeatedly throughout the year has our Secretary asked of the advice and assistance of your Council by mail ballots.

Councilors of my acquaintance have told me from time to time during the year that they found it hard to give the time essential to an early reading and careful study of the important material forwarded to us. I report this to you for the purpose of placing emphasis upon two points:

1. The office of Councilor is of such great importance that it is deserving of the best men to be found within our profession.
2. Your Society is not in any sense of the word a "one-man" organization. The Council follows the policies laid down by the House. On all new questions arising in the interim between meetings, our Secretary is exceedingly careful to submit these to the Council that the work of the Society may always represent the desires and reflect the wishes of the entire membership.

Minutes of the Council meetings are to be found in our Journal. In addition to the regular meetings of the entire Council, we have created an Executive Committee which may be called together with ease and rapidity. This Committee does not act upon its own initiative but rather serves as a discussion group to develop pending questions of great importance more fully. Recommendations of the Committee with explanations are then forwarded to the entire Council for mail action. This Committee has had several meetings during the year past and has proven to be a very valuable body.

Finally your Chairman is certain that he reflects the views of all Councilors when he reports to you that your Society is handling problems of a magnitude that would be utterly impossible were it not for the type of central office which your dues make possible. The highest compliment to our efforts was given during the year by the American Medical Association by repeated letters of praise for the assistance rendered by us in meeting problems national, as well as state-wide, in their scope.

Your Council appreciates deeply the confidence vested in it by the Society and has constantly endeavored in every possible way to so guide the activities as to merit that confidence.

Respectfully submitted,

ARTHUR W. ROGERS,
Chairman.

REPORT OF THE TREASURER

To the 1935 House of Delegates:

To the end that the Treasurer's Report may be sufficiently complete to cover the first three-quarters of the calendar year, it will be presented on the floor of the House of Delegates.

Respectfully submitted,

ROCK SLEYSTER,
Treasurer.

SECRETARY–MANAGING EDITOR

To the 1935 House of Delegates:

While the work of the central office of your Society is reported throughout the year by numerous bulletins and in the Journal, this summary is presented for the consideration of the House.

Membership

Membership of the Society for the calendar year 1933 was 2,044; for 1934 it was 2,140. Membership on July 31st was 1,995, 200 over the same date of a year ago. It appears probable that the membership for the calendar year of 1935 will reach 2,200, which will be the highest mark in the history of your Society.

The Journal

Prior to the loss of advertising suffered in the last four years, the revenue of your Journal made it entirely self-supporting. It was one of the very few similar publications that enjoyed such a record.

Due to the loss of advertising revenue, however, and due to the decision of the Editorial Board and Council that the content of the Journal should be maintained at its previously high standard, an annual appropriation of $3,000 has been necessitated from the general fund. This appropriation approximates that which similar societies pay at all times.

In an effort to again place the Journal on a more nearly self-supporting basis materially reducing this appropriation from the general fund, we are now engaging in an intensive advertising solicitation campaign. Through the splendid cooperation of the general membership, a survey of the buying power of Wisconsin physicians was completed in the late spring. The data so gathered was then tabulated according to the various advertising lines and

the results, printed in a most attractive form, are now being mailed, together with personal letters and sample copies of the Journal, to some five hundred prospective accounts. It is hoped by January the results of this campaign will be evidenced by a materially larger advertising income.

Throughout the year we have continued to publish a full-size Journal and continuous changes have been made constantly to improve the typographical appearance of the publication. In February a special "Medical Economics Page" was instituted. From comments received it seems to be a well-liked feature and its continuance warranted.

Scientific Work

Despite a period of constant emergencies in the field of medical economics that has made extremely heavy demands upon the time of your central office, particular efforts have been made during the year to advance the field of scientific work. It will be noted in the Report of the Committee on Scientific Work that we again were able to issue to officers of component County Medical Societies several bulletins containing upwards of seventy suggested speakers for county meetings. Each speaker was listed for from one to three subjects and all were taken from within our own membership, each agreeing to speak within a radius of seventy-five miles from his home without reimbursement for travel expense. Many societies throughout the State took advantage of these suggestions and the success of the work merits continuance.

Under the Report of the Committee on Cancer it will be noted that your central office devoted much time to the planning and detail work for the six district cancer clinic centers. It appears that this plan of presenting national speakers at district meetings within the period of a week is one that is pleasing to the membership and one which works well from the educational viewpoint. If it meets with the approval of the House, similar centers may well be held a year hence on another subject.

Tentative plans for an elaboration of postgraduate courses in the field of obstetrics and pediatrics were to be presented to the State Board of Health at its July 31st meeting. These plans were to take advantage of the increased Federal funds made available for health work, particularly in rural areas, in the field of maternity and child welfare. Developments will be reported in a supplementary report of the House.

The results of the several meetings of the Committee on Scientific Work under the chairmanship of Dr. John O. Dieterle of Milwaukee, appear in the nearly completed plans for the Ninety-Fourth Anniversary Meeting of our Society published elsewhere in this issue. Particular effort has been made by Dr. Dieterle and his Committee to formulate a well-rounded program that will be of both inspirational interest and practical value to all within our membership.

Suggestions have also been made for the furtherance of the programs of component county medical societies by appropriations from within each of the medical schools to permit a greater freedom of travel by their teaching staffs. It is hoped that these suggestions may be fruitful within the year and that such effort particularly will meet the program needs of component societies that are rather distant from any of the medical centers of the State.

Care of the Indigent

The membership will recall that Wisconsin was one of the first states to provide an allowance for meeting the emergency medical needs of the indigent. It appears to be one of the exceedingly few states where free choice of the physician exists throughout the State, in metropolitan as well as in rural areas.

Despite sporadic efforts to return to the county physician system, free choice has been maintained throughout the year.

While the allowance granted has never been considered as constituting actual compensation for the time and effort expended by our membership, yet the total grants per month have been large and the income in many areas has proved to have been a material aid to our members in carrying forward under the most critical economic conditions.

Works Project Administration

Two questions arise in connection with the new Works Project Administration. The first of these concerns possible health projects such as the suggested survey of Milwaukee County (suggested by a layman) of medical service within the county looking towards the establishment of cooperative medical clinics and low cost medical clinics. Contacts are being made with the administrator to the end that the services of this Society may be utilized in passing upon and supervising intended health projects.

The second question that is of great and grave concern relates to medical care for those who will be transferred from the relief rolls and employed on the new projects. We understand that the U. S. Employees' Compensation Commission is endeavoring to work out a more equitable plan for the coverage of injuries incurred in the line of employment. No plans have been announced to date, however, to provide supplementary medical relief for illnesses not contracted in employment and the illnesses of the employee's family. The wage scale is not much, if any, above a subsistence wage, and it will be obvious to all that if supplementary aid is not extended by the relief administration, illnesses in such families may prove to be a very great burden upon the profession. The Society has had a representative in Washington in an effort to secure a ruling that upon investigation supplementary relief could be granted through the Federal relief set-up. A representative of the American Medical Association is now at Washington on the same mission. We are hopeful that some favorable announcement may be made in the not distant

future. We have been in constant contact with the American Medical Association and have pledged our aid in this effort in any way that it may be helpful.

Social Security Bill

Under sections of the Federal Social Security measure large sums of money are to be made available for health work in the several states. An analysis of the measure from the viewpoint of funds that may be allotted to Wisconsin is now being made by the State Society. Conferences will be held with State health officials looking towards the formulation of plans for health work within the State which will carry within themselves the greatest promise for public service.

Public Education

The work of the Auxiliary has been a notable contribution to the efforts of the profession in this field. Your Secretary specifically calls attention of the members of this House to the fact that our Auxiliary took first place among all state organizations in promoting the sale of Hygeia during the past year.

The work of the central office in the field of radiocasts, press releases and in Hygeia promotion are to be found in detail in the report of the Committee on Health and Public Instruction.

At the last meeting of the House, the Secretary presented for the approval of your body a tentative plan for a liaison body of laymen as contemplated by President Seeger. This plan met with your enthusiastic approval. Subsequently difficulties arose in perfecting a constitution and by-laws and articles of incorporation that would provide that degree of medical control so essential to the success of the plan. This has been met satisfactorily during the spring but the limited staff of the office could not undertake the formation of this unit during the remaining months of the legislative session. The plan is now ready for final Council approval in every detail, and will be inaugurated during the fall.

Legislation

Elsewhere in this issue appears the report of the Committee on Public Policy. In addition some fifteen or more pages of the September issue of the Journal will be devoted to a bill by bill report on health legislation during the present session. As this report is issued the legislature is entering upon its eighth month of continuous activity. Some sixteen hundred bills have been introduced with over two thousand three hundred amendments.

Upwards of one hundred and twenty of these measures have directly or indirectly affected the subject of public health and the practice of medicine. Moreover, the subjects of those measures which did affect us most seriously were of exceeding importance and not infrequently were they advanced through lobbies with large funds at their disposal.

As this is written several important measures are still pending and fifty additional bills must be watched because they are still subject to amendments which might affect the public health in an extremely adverse manner. Each measure introduced, and each amendment thereafter, must be read and frequently studied. Well over a hundred committee sessions had to be attended and a large number required presentations of the views of the profession. Moreover, literally hundreds of hours had to be devoted to attending sessions of the Assembly and Senate during which time important measures were to be voted upon.

Four separate antivivisection measures were introduced, for instance. Another measure relating to liquor control had to be amended in the Senate after it had passed the Assembly, to strike from the bill a permit fee proposal upon the use of alcohol that would have cost each member of our Society $10 a year.

Your Secretary again urges each member to read the long report to be published in your September Journal. He cannot over-emphasize the fact that the notable success of your Society has been in large measure due to the splendid cooperation afforded him by individual members throughout the state who responded wholeheartedly time and time again to his requests for aid throughout the entire session. To these members who rendered such signal service your Secretary feels a deep sense of personal gratitude which he will never be able fully to discharge.

Wisconsin Hospital Association

In the past five years your Secretary, with specific consent of the Council, has acted as Secretary of the Wisconsin Hospital Association. His honorarium of $150 a year is turned over to the general funds of the State Medical Society.

The work of the two associations operating out of the one central office has been mutually advantageous from its inception and particularly during the past three years. It is to be noted that the Wisconsin Hospital Association has taken a sane position on hospital insurance plans and that none is in operation in the state. The Association did all that was possible to secure the adoption of the partial assignment law in injury cases. Its continued efforts will undoubtedly prove to be the major factor in winning this measure in the next legislative session.

Numerous bulletins have been issued to hospitals and sanitariums throughout the year on subjects of great importance to them. These bulletins have gone to the hospitals of all members and have meant the saving of many thousands of dollars in hospital operation with its consequent small but important reductions in the total cost of illness.

Sickness Insurance

The work of your Society in the field of sickness insurance has been of such major importance throughout the year passed that it is extremely hard to summarize it in a succinct manner.

Because the Director of the President's Committee

on Economic Security was Professor E. E. Witte of Wisconsin and because the Chairman of its technical staff was Mr. Arthur J. Altmeyer, formerly Secretary of the Wisconsin Industrial Commission, your Society was in particularly fortunate position to make known to the national committee studying the subject of compulsory sickness insurance, the exact position of the medical profession. This relationship occasioned three trips to Washington by your Secretary, each with the approval of the Council. Possibly in some part as result of this effort, no hasty legislation was proposed and it now appears that further consideration of federal legislation will go over to another congressional session.

Believing that need existed to demonstrate conclusively that the impetus for all compulsory sickness insurance legislation was coming from subsidized foundations and not from any real demand of the general public, your Secretary prepared the pamphlet "Sickness Insurance and the Propagandist Foundations". While the pamphlet was not intended for distribution other than to our own membership, large numbers of reprints at cost were furnished several other state societies.

As was related in legislative bulletins, two separate proposals were made in the current session of the Wisconsin Legislature to create interim committees to "study the costs of medical care and to devise ways and means of lowering the costs thereof". A great deal of time was spent in outlining and presenting the exact position of the medical profession on this question. Our presentation on the subject appeared in a special legislative bulletin sent to the entire membership. Neither proposal passed the Senate.

Upon request of the Medical Society of Milwaukee County, your Committee on Medical Economics and the Executive Committee of the Council recommended to the Council that a bill be introduced in the Wisconsin Legislature (733, A) increasing the powers of the State Society and component societies to devise plans and enter into contracts for the care of the indigent and low income groups in event that future situations arose necessitating the inauguration of such plans under the medical profession. Introduction of the measure was approved by the Council with the sole proviso that plans of component societies shall be formulated "in a manner approved by the State Society". This position was subsequently endorsed by the House of Delegates of the American Medical Association at its Atlantic City session. The measure from its inception was attacked by cult groups and all efforts to amend it were staved off in the Assembly and the bill passed by the narrow margin of one vote. As this report is written, the measure is again under attack in the Senate and a vote deciding its fate anticipated daily.

Hours upon hours of the time of your Society employees and legal counsel have been devoted to most careful and intensive analyses of experimental plans adopted elsewhere designed to improve the delivery of medical service. Recognizing the emergency that existed, the Council, upon recommendation of your Secretary and Executive Committee, made available the sum of $5,000 from the surplus funds of the Society. This enabled the Society to secure the services of Mr. George B. Larson, formerly with the Minnesota State Medical Association and previously Secretary of the Polk County (Wis.) Society, as assistant to the Secretary. Constant contacts have been maintained with the Bureau of Medical Economics of the American Medical Association and several conferences with its Director have been held in the course of the year both at Milwaukee and Chicago. Mr. Wiprud, Secretary of the Medical Society of Milwaukee County, and Dr. John W. Powers of the Business Bureau of that Society, were authorized to study in person the Wayne County plan in operation in Detroit. A full report upon the working of this plan was made to the Council, and in addition Mr. Larson made a personal study, at the request of the Council, of hospital insurance plans in operation in Minneapolis and St. Paul.

Several of the more feasible-appearing plans were studied in great detail both by the Committee on Medical Economics and the central office. This work necessitated a very large correspondence.

Your central office also prepared in mimeographed form, a rather comprehensive outline presentation for talks on the general subject matter by physicians. This outline has been used frequently by physicians called upon to discuss the subject before lay groups, and it is contemplated that it will be printed during the early fall to serve as material in filling requests of high school and college debate groups.

While a supplementary report will be made before the House of Delegates, your Secretary takes this opportunity to suggest that the work of the Society will have to continue unabated during the coming year and probably during many years to follow, if the position of the profession as outlined by your House at its 1934 session is to be presented forcibly and with success. The value of successful effort will be apparent to the entire membership.

Office Work

Throughout the year the general office work of this Society has continued with expansion necessitated by the increased correspondence from the general membership due to the economic situation. The first class mail out of the central office exceeded 70,000 communications. In addition, nine legislative bulletins to the entire membership, a special bulletin to the Medical Society of Milwaukee County, four bulletins to officers of component county medical societies, and twelve issues of the Journal and twelve issues of the Crusader were addressed in the central office in the past twelve months. Particular demand has been made upon the services of this Society in answering inquiries concerning quackery, collection agencies, and on legal subjects.

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Prompt Attention Given to Professional Inquiries

PRINCIPAL OFFICES AND LABORATORIES, INDIANAPOLIS, INDIANA, U. S. A.

Your Secretary is particularly anxious that members of the House appreciate that the work of the office could not have been handled in either an effective or expeditious manner had it not been for the loyalty of the limited office force that thought nothing of overtime work and a normal day at high speed.

Travel

In the course of the year your Secretary has made addresses before the Medical Society of Milwaukee County, the Clinic Managers of the United States, the Northwest Medical Conference, the Secretaries of the Minnesota State Medical Association, the Walworth County Medical Society, the Dodge County Medical Society, the Ninth Council or District, and a special address on the subject of sickness insurance before the Wisconsin Credit Association. Numerous committee meetings have been held, including two meetings of the Council, attendance upon one meeting of the Board of Medical Examiners and meetings of the Committees on Cancer, Public Policy, Medical Economics, Editorial Board, Executive Committee of the Council and the Committee on the Coordination of Medical Services.

Your Secretary has assisted in an experiment in a new method of forensic presentation of debate subjects in high school classes. He has also addressed, upon occasion, several important lay groups on the subject of sickness insurance and he has held almost daily conferences with state officers.

Invitations to speak before lay groups on the subject of sickness insurance and the cost of medical care have become so frequent that your Secretary could very easily devote his entire time to this work. In but exceptional cases, he must follow the rule that his addresses shall be limited to state or district groups.

Recommendations

1. It has been suggested to the Secretary that it would be advantageous to all concerned were the House of Delegates to authorize a section of the Society on eye, ear, nose and throat similar to the section on radiology. Your Secretary concurs in the suggestion and places it before the House for consideration.

2. Over a period of years it has been discovered that the collection of dues is frequently delayed by reason of the fact that many component societies hold their annual meetings for the election of officers in December. This means that the Secretary, whose term expires, is reluctant to enter upon the collection of dues for the coming year not knowing whether or not he is to continue in office. Your Secretary recommends to the House that component societies be encouraged to hold their annual election at their October meetings.

3. Within the past few weeks it has become apparent that at least part of the membership of the State Board of Medical Examiners holds the conviction that the full-time investigator for weeding out quackery in this state should be transferred from the jurisdiction of the State Board of Health to the State Board of Medical Examiners. Your Society, by direction of the Council, is presently opposing this specific measure in the Wisconsin Legislature. Your Secretary has advised members of the Board of Medical Examiners, however, that he is confident that the House would welcome discussions of the proposal and he urges that the House grant the time for such a discussion at this annual meeting.

4. Upon the recommendation of the Medical Society of Milwaukee County, the Council made a Committee on Mental Hygiene of that Society a special committee of the Council. The Committee prepared in the short time that was at its command, a legislative program, part of which had to be submitted to the Council by mail.

Your Secretary is conscious of the fact that considerable legislation is indicated in this field. Its complicated nature, however, requires a great deal of time with legal counsel if an effective presentation is to be made. Particularly is this program necessary in view of the fact that certain groups constantly ask for material exemption from all laws relating to commitments and treatment. If this House feels that the subject matter is one in which active participation of this Society should be continued, your Secretary suggests that it authorize the President to appoint a special committee on this subject to supersede the present committee of the Council. The new committee should continue with personnel intact from date of appointment until the conclusion of the 1937 session of the Wisconsin legislature.

It is furthermore suggested that an appropriation to provide adequate legal advice, so essential to any actually constructive program, be authorized at this time in the amount of $500 a year for each of the next two years.

Conclusion

Your Secretary is without adequate means to express his keen perception of the fact that the success of your organization is due in very large part to the splendid cooperation of a large membership. The extent of this cooperation can only be realized by one who is in intimate contact with the central office of this Society.

To the membership, to the Committees, and to the Officers, your Secretary acknowledges this outstanding cooperation with deep appreciation and profound gratitude.

Respectfully submitted,

J. G. Crownhart,

Secretary.

COMMITTEE ON PUBLIC POLICY

To the 1935 House of Delegates:

Your Committee on Public Policy originally intended to accompany this report with a detailed analysis of the over 120 measures with which we were concerned during the present legislative session.

Civilization

AND THE PROBLEMS OF DIET

New knowledge has brought new viewpoints regarding dietary constituents—particularly the vitamins. Primitive provender was vastly different from the food of today. Moreover, the methods of cooking as generally practiced and the frequent tendency to choose foods for their toothsomeness may rightly raise questions as to whether the full dietary requirements have been met. Among other things we know that vitamins A and D are indispensable to normal growth, health, and vigor.

Science

HAS MADE IT EASY

to furnish an adequate amount of these vitamin factors in a palatable form, unobjectionable to the most finicky of patients. Years of intensive research on nutritional problems have led to the development of Haliver Oil with Viosterol as an excellent source of Vitamins A and D.

"The Room of a Thousand Cages"

For many years Parke, Davis & Company's scientific staff has actively engaged in vitamin research. Pioneering and fundamental investigation of halibut liver oils was undertaken in these laboratories. From this rich experience is derived a thorough understanding of the problems of preparation, stabilization, and standardization of Haliver Oil. It is this background that contributes to the confidence with which the physician specifies "Parke-Davis Haliver Oil with Viosterol."

Parke-Davis Haliver Oil with Viosterol is supplied in 5-cc. and 50-cc. amber bottles with dropper, and in boxes of 25 and 100 three-minim capsules.

PARKE, DAVIS & COMPANY, DETROIT, MICHIGAN

Because the session promises to adjourn during August, this long analysis will be withheld from publication until the next (September) issue of your Journal. It will occupy from fifteen to twenty printed pages in that issue, and we most sincerely urge upon every member that that report be studied carefully when issued.

Your Committee held an all-day meeting conjointly with the Committee on Medical Economics prior to the opening of the present session of the Legislature. This meeting was preceded by the receipt from the central office of twenty legal single-space typewritten sheets of material submitted for the consideration of the joint committees. This material, including recommendations from the House, was studied in the greatest of detail.

With respect to legislation we wish to report to the House our success in passing the Medical Grievance Committee bill. To the best of our knowledge, Wisconsin is the second state to have such a law on the Statutes. We feel that this is a most important accomplishment.

While we were unable to pass the partial assignment law to protect physicians and hospitals in accident cases, the full debate upon the measure (reported in the July issue of the Journal) so developed the question as to make it seem reasonably certain that a similar measure will pass in the next session. This is frequently necessary in this type of bill,—to develop all the opposition in the first session so as to meet it successfully in the second.

A third measure sponsored by the Council of the Society enlarging upon our powers to meet future emergency needs for low income groups and the indigent has passed the Assembly and is now pending in the Senate. If this measure passes it will grant extensive powers to the Society.

The lobby of the cults was the most extensive at this session since the sessions of 1921, 1923, and 1925. Your Committee estimates that many thousands of dollars were spent in an effort to advance cult legislation. Your Society, on the other hand, spent not a single penny for entertainment purposes and yet succeeded, through the splendid cooperation of the membership throughout this State, in killing every measure which it opposed.

A long report of your Committee was published in the February issue of our Wisconsin Medical Journal on pages 133 and 134. Summarized actions of the Committee follow:

1. *Investigator for State Board of Health.* The Committee, with Council approval, has used its best efforts to secure the continuation of the appropriation for this investigator under the State Board of Health.
2. *Model State Narcotic Law.* The Committee carefully analyzed this twenty-six-page bill and proposed three amendments which were adopted before the measure passed the Legislature.
3. *American Graduates of Foreign Schools.* The House of Delegates of 1934 asked your Committee to study this question. It has now prepared a rule on this subject which it will present to the State Board of Medical Examiners for their consideration and, if approved, for adoption.
4. *Medical Health Officers.* The House of Delegates referred to the State Board of Health the resolution introduced in the 1934 House of Delegates providing that health officers in cities, towns or villages of 3,000 or more must be physicians, and that health boards in such communities must include at least one physician. The Board of Health did not feel that this was an appropriate time to introduce this measure but has promised assistance in a future session.
5. *Care of Epileptics.* Your Committee has considered the House of Delegates resolution of 1934 recommending that it urge on the Board of Control the need of special provision for the proper care, treatment and education of epileptics. It has made its report to the Board of Control accordingly, but found that the present financial situation did not permit of the extension at this session.
6. *Prenuptial Examinations.* Your Committee carefully considered the resolution introduced in the House by Dr. W. C. Henske, of Chippewa Falls, and referred by the House to this Committee. With Council approval the Committee re-referred this resolution to the State Board of Health.

In addition to the legislative program of the Committee and other actions herein reported, the Committee on January 28th, with approval of the Council, addressed the following letter to Dr. C. A. Harper, State Health Officer, and Secretary of the State Board of Health, and to all members of the Board.

"During the past several weeks there have been meetings of our Committee on Public Policy, Committee on Medical Economics, and of the Council. I am indeed sorry that you found yourself unable to attend the Council meeting held in January for we were truly very anxious to have you with us.

"As result of these several meetings, the Council directs me to refer several subjects to the attention of the State Board of Health. To the end that copies of this letter may be available for each Board member, I have taken the liberty of placing it directly upon a stencil that sufficient copies may be had by mimeograph. Please pardon this method of transmitting it but it seemed the most feasible from your standpoint. Copies sufficient for distribution to the Board members are herein inclosed.

"1. Our Committee on Public Policy desires to give the fullest support to the State Board of Health

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IN the production of ice cream of outstanding quality, modern sanitary machinery in a modern sanitary plant is most important. But we believe that our first obligation is to make certain that all sources of supply are protected by every safeguard known to modern science.

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IN CASES of tonsilitis, pharyngitis, peritonsillar abscess, retro-pharyngeal abscess, cervical adenitis—

In *all* cases where swallowing is difficult and a large amount of carbohydrate is desired, Cocomalt mixed with milk will be found useful.

For Cocomalt is unusually high in caloric value. Mixed with milk as directed, it adds 50% more protein, 170% more carbohydrate, 35% more calcium, 70% more phosphorus. It is rich in Vitamin D, containing not less than 30 Steenbock (81 U.S.P. revised) units per ounce—the amount used to make one glass or cup.

Furthermore, Cocomalt is exceptionally palatable. It is easily digested and assimilated. It comes in powder form, easy to mix with milk—HOT or COLD. It is sold at grocery and drug stores in ½-lb. and 1-lb. air-tight cans. Available also in 5-lb. cans for professional or hospital use, at a special price.

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in securing at least a renewal of the present appropriation for the Investigator to weed out major forms of quackery in this state. We desire to make our support active and will appreciate your advising us of all hearings to which our presence may be helpful in this matter.

"2. The Committee on Public Policy has made a detailed study of the illegal use of the title "Dr." in this state and the difficulties in protecting the public against such abuses as encountered by your Investigator. It is the decision of the Committee and the Council that the Society will gladly join with the State Board of Health in asking the Governor to appoint special legal counsel to take the legal steps necessary to bring about proper enforcement of this statute throughout the State. We have in mind specifically the present availability of the services of Mr. Fred M. Wylie, formerly legal counsel of this Society, and formely deputy attorney general, under whose immediate supervision several long briefs on this subject matter were prepared on several occasions. In event that it meets with Board approval, I shall be very happy to meet with you, Doctor Harper, at whatever time you consider appropriate that together we may wait upon the Governor.

"3. The House of Delegates of our Society recommended the introduction of legislation to provide that health officers in cities, towns, or villages of 3,000 or more must be physicians, and that Health Boards in communities of like size must include at least one physician.

"The Committee on Public Policy and the Council, in view of the fact that the State Board of Health introduced even broader measures than this at the last session, believe that this matter should be referred to the Board of Health for their own consideration. We shall be very happy to support any legislation looking towards this end which the Board may determine wise at this time.

"4. The Committee on Public Policy wishes to convey to the State Board of Health its willingness and readiness to appear before the legislature in support of any measure introduced by the Board of Health looking towards securing such funds as may be necessary to further the present contact service between the profession of the state and the Board.

"5. At the 1934 meeting of the House of Delegates there was introduced by Dr. W. C. Henske of Chippewa Falls a resolution relating to broadening of prenuptial examinations. A copy of this resolution is made an agendum to this report.

"Our Committee on Public Policy believes that the subject matter is broader than merely its medical aspects and that under these conditions, the subject is one for consideration of the State Board of Health rather than just the State Medical Society.

"6. In event that your Board feels that the present state enabling law pertaining to the creation of county health departments is in need of present amendment, our Committee on Public Policy will be very happy indeed to cooperate in working out such amendments and we wish formally to offer our cooperation to that end.

"7. The question has been raised by the head of the Department of Pharmacology of the University of Wisconsin whether we should not have a law to limit the counter prescribing of hypnotic drugs. Our Committee on Public Policy feels that such a measure is purely one in the interest of the public health. It recognizes that should the State Society introduce such a bill, however, it may be said that we seek to further some other end. Secondly, we are not acquainted with the actual data which permits us to charge whether or not the present open sale of hypnotic drugs has been sufficiently abused so as to create a distinct need at this time for such a law. In event that it is the judgment of the Board that such a law is needed, you are assured of our support both in drafting the bill and in presentation of arguments in its favor before the legislature.

"8. The Council of the Society directs me officially to call to your attention a situation wherein (a) there are no restrictions upon who may open a hospital or as to the personnel required for a hospital; (b) no restrictions upon what equipment shall be contained in a building which designates itself to the public as being a "hospital"; and (c) wherein it is within the knowledge of members of the Council that proper safeguards for the welfare of the patients from the viewpoint of fire hazard are not always seemingly sufficient.

"The Council is of the opinion that in order to secure proper protection for the public health it well may be advisable for your Board and the Council, through delegates, to present this situation for the attention of Governor La Follette with the specific thought of the creation of a committee representing the State Board of Health, the State Medical Society of Wisconsin, the Wisconsin Hospital Association, and the legislature to study the questions involved and to report on needed legislation. We are anxious to do everything possible looking towards the proper public protection and we hope that the Board will join us in presenting the situation to the attention of the Governor.

"9. Finally, as Secretary of the Society, we wish to assure the Board of our readiness to cooperate with it in any way in which the Board may deem our services of value. We appreciate the many pending changes including such matters, for instance, as the Wagner Social Security measure, and the officers and several special committees of the Society are available at all times for any call of the Board as a whole or the State Health Officer. This offer is a very wholehearted one.

"With kind personal regards to you and members of the Board, I am

Sincerely and most respectfully,
(Signed) George Crownhart,
J. G. Crownhart,
Secretary."

GOOD SCHOOL WORK DEPENDS ON GOOD VISION

Shuron Young America Glasses Are Specially Designed For Juvenile Wear

THE MILWAUKEE OPTICAL MFG. CO.

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"Resolution by Dr. Henske Referred to in Paragraph 5.

"WHEREAS, Section 245.10 of the statutes of 1933, which is generally known as Chapter 212 of the Laws of 1917, does not make the Wassermann test or any syphilitic test mandatory; and

"WHEREAS, Said act does not require that the physician refuse a certificate of physical well-being to those applicants who are grossly mentally deficient and easily identifiable as such; and

"WHEREAS, It is obvious that female parties to marriage contracts may possibly be infected with gonococci or syphilis as well as the male; now therefore be it

"*Resolved*, By the 1934 House of Delegates of the State Medical Society of Wisconsin respectfully petitions the Senate and Assembly of the State of Wisconsin to take immediate steps to enact legislation which will:

"1. Require a complete physical and mental examination to be made of applicants for a marriage license.

"2. An examination of all female persons making application for license to marry in the same manner as males;

"3. A test, of all persons making application for license to marry, for syphilis, such test to be some duly recognized syphilitic test; be it further

"*Resolved*, That properly attested copies of this resolution be sent to the President of the Senate, Speaker of the Assembly and the Chief Clerk of the Senate and Assembly, respectively."

Your Committee again urges upon every officer and member to read its detailed legislative report to appear in the September issue of the Journal. It takes this opportunity to make acknowledgment of the fact that the splendid record of the Society during the current legislative session would not have been possible without the splendid and continuous cooperation of members throughout the State.

Respectfully submitted,

REGINALD H. JACKSON,
Chairman,
STEPHEN E. GAVIN,
DEXTER H. WITTE,
The President, President-Elect, and Secretary, ex officio.

COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

To the 1935 House of Delegates:

The work of health education on the budget that is available to the Committee is divided into three fields—Radio, Press, and Hygeia. Your Committee makes a brief report on its activities in each of these fields herewith.

Radio

Since January, 1931, your Society has broadcast 575 health talks. These talks are heard over the two State-Owned Radio Stations,—WHA, Madison, and WLBL, Stevens Point. For nearly three years the health talks have been presented each week on Tuesday, Wednesday and Thursday mornings. Your Society attempts to present authentic health talks of a timely character. The health talks are carefully prepared and devoted to the promulgation of sound information in the field of health and hygiene. Upon request copies of the prepared talks are sent to County Medical Societies for use over their local radio stations. Schedules of the health talks appear in each issue of the Wisconsin Medical Journal.

Press Service

The Press Service of your Society has continued during the past two years with a budget only to cover the cost of paper and mailing. Releases are issued weekly to 248 newspapers in Wisconsin—213 weekly papers and 35 daily papers. Since August, 1933, the stories have been prepared in the office of your Society, and every effort is made to give the readers interesting and valuable information in the field of health preservation. Numerous newspaper clippings indicate that this material is widely used throughout the state.

Hygeia

For several years your Society has presented gift subscriptions of Hygeia, the health magazine of the American Medical Association, to the Wisconsin Legislators, Justices of the Supreme Court, Normal Schools, Superintendent of Public Instruction, members of the Industrial Commission, and others officially having to do with questions involving health and the medical profession. At Christmas time each year a personal letter is sent to each recipient of Hygeia. One hundred seventy-eight (178) subscriptions were presented by the Society for the calendar year of 1935. Many acknowledgments were received.

A United States Senator said: "I wish to express my appreciation for this additional courtesy of your Society."

A Teachers College thanked the Society for the renewal gift subscription to Hygeia and said "Let us assure you that it is put to constant good use in our library."

Another State Teachers College states that "This gift makes it possible for us to have copies available in both the college and the training school libraries."

A Supreme Court Justice says "I have your letter of December 21st, advising me that I am again to receive Hygeia with the compliments of the State Medical Society. Please accept my thanks for this courtesy. I read the magazine quite thoroughly and get a good deal of information from it."

The following letter of thanks was one of several received from Assemblymen: "I wish to thank you and the members of your Society for the gift subscription to Hygeia. I am sure that I will enjoy it very much and that I will gain much profitable knowledge from it. Public health is a question of

COOK COUNTY GRADUATE SCHOOL OF MEDICINE

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GYNECOLOGY — Three Months Course; Two Weeks Course; Special Course Gynecology and Obstetrics September 2nd.

OBSTETRICS—Informal Course; Two Weeks Intensive Course; Special Course Gynecology and Obstetrics September 2nd.

FRACTURES AND TRAUMATIC SURGERY—Informal Course; Intensive Ten Day Course starting October 14th.

PEDIATRICS—Informal Course; Personal Courses.

EAR, NOSE AND THROAT—Informal Course; Intensive Two Weeks Course starting October 7th.

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CYSTOSCOPY — Intensive Course (attendance limited).

General, Intensive and Special Courses in Tuberculosis, Ophthalmology, Roentgenology, Pathology, Neurology, Electrocardiography, Topographical and Surgical Anatomy, Physical Therapy, Gastroenterology, Allergy.

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Short Wave Diathermy

with greater simplicity and safety. The Burdick Short Wave unit may also be used for electrosurgery.

Prices f.o.b. Factory at Milton are $375.00 for the portable unit and $425.00 for the cabinet unit with an allowance on your old style diathermy. Write for details.

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Exchange price on pocket Aneroid complete ---------- $20.00

Echange price on Tycos dial only - $13.00

ROEMER DRUG COMPANY

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vital importance. In my capacity as Assemblyman I am sure that you can depend on me to support any reasonable measure to safeguard the health of the state."

The presentation of gift subscriptions of Hygeia to public officials is a long established policy of the State Society. It is a service worthy of continuation.

One thousand one hundred and ninety-nine (1,199) Hygeia subscriptions were placed by the Wisconsin Auxiliary during the period of one year giving Wisconsin first place among all of the state auxiliaries competing in the National Auxiliary Hygeia contest. Last year the Wisconsin Auxiliary obtained third place. A very large percentage of the Hygeia subscriptions were placed in schools, in accordance with the program outlined by the National Hygeia chairman. This achievement represents considerable time and effort on the part of practically every Hygeia committee in the State Auxiliary.

A new Hygeia campaign with the Auxiliary and the Society acting jointly is planned for the late fall.

C. H. Christiansen,
Chairman.
R. W. Blumenthal,
W. G. Sexton.

COMMITTEE ON MEDICAL DEFENSE

To the 1935 House of Delegates:

Inasmuch as I am now having a survey prepared of our Medical Defense since its inception in 1908, for presentation to the House at the coming annual meeting, I shall refrain from offering any detailed report at the present time. Suffice it to say that 15 cases were submitted for legal action during the past year, 10 of which were new suits, and 5 holdovers from the preceding year.

It is with great regret that we note the resignation of Mr. Robert R. Freeman as counsel for the Defense. Mr. Freeman has given our Society splendid support, and his experience of many years in medico-legal affairs has made his aid invaluable in numerous hard-fought court battles. Mr. Freeman now severs his connection with the Society for the second time, he having succeeded our first attorney, Mr. W. Spooner, upon the latter's death, but having been compelled to resign later because of removal from the city.

No successor to Mr. Freeman has as yet been appointed, but all pending matters are being given needed attention.

Respectfully submitted,
Arthur J. Patek,
Secretary.

COMMITTEE ON NECROLOGY

To the 1935 House of Delegates:

The Council, as the Committee on Necrology, has the sad duty of reporting the deaths of the following physicians since the last Annual Meeting (members of the Society are indicated by bold face type):

Dr. W. C. Abaly ---------- Madison
Dr. Harold M. Akey ---------- Merrill
Dr. A. A. Axley ---------- Washburn
Dr. Charles R. Bardeen ---------- Madison
Dr. B. F. Bellack ---------- Columbus
Dr. A. C. Borchardt ---------- New London
Dr. Lester M. Brooks ---------- Milwaukee
Dr. A. D. Brown ---------- Mineral Point
Dr. H. A. Buell ---------- Prairie Farm
Dr. Arthur J. Burgess ---------- Milwaukee
Dr. A. J. Caffrey ---------- Milwaukee
Dr. J. W. Coon ---------- Stevens Point
Dr. M. V. De Wire ---------- Sharon
Dr. Ray M. Frawley ---------- Wausau
Dr. William A. Fulton ---------- Burlington
Dr. D. J. Gardetto ---------- Milwaukee
Dr. A. E. Gendron ---------- River Falls
Dr Joseph Godfrey ---------- Lancaster
Dr. George F. Goggins ---------- De Pere
Dr. Jacob Gomber ---------- Goodman
Dr. John E. Guy ---------- Milwaukee
Dr. W. V. Hausherr ---------- Florence
Dr. A. B. Jensen ---------- Menasha
Dr. Louis F. Jermain ---------- Milwaukee
Dr. J. E. Johnson ---------- Grantsburg
Dr. Thomas P. Keenan ---------- Lake Geneva
Dr. F. W. Kitzki ---------- Milwaukee
Dr. F. J. Korthals ---------- Milwaukee
Dr. Robert W. Lehigh ---------- De Forest
Dr. F. L. Leister ---------- Lancaster
Dr. Samuel H. Lippitt ---------- Milwaukee
Dr. Arthur W. Loeber ---------- Milwaukee
Dr. J. R. Longley ---------- Fond du Lac
Dr. J. A. Lowe ---------- Pleasant Prairie
Dr. William A. Lumley ---------- Ellsworth
Dr. John R. McDill ---------- Milwaukee
Dr. A. E. Mieding ---------- Milwaukee
Dr. Simon Miller ---------- Mondovi
Dr. R. E. Minahan ---------- Green Bay
Dr. James M. O'Brien ---------- Oregon
Dr. D. J. O'Connor ---------- Appleton
Dr. L. H. Pelton ---------- Waupaca
Dr. Lawrence W. Pence ---------- Milwaukee
Dr. George W. Post ---------- Milton
Dr. R. L. Prees ---------- North Fond du Lac
Dr. Emil B. Quade ---------- Wausau
Dr. Fern A. Rice ---------- Delavan
Dr. Ida L. Schell ---------- Milwaukee
Dr. A. J. Schweichler ---------- Milwaukee
Dr. F. C. Senn ---------- Oshkosh
Dr. Walter H. Sheldon ---------- Madison
Dr. H. A. Sifton ---------- Milwaukee
Dr. Frank A. Southwick ---------- Stevens Point
Dr. Grant F. Tanner ---------- Turtle Lake
Dr. William M. Urkart ---------- West Bend

CANCER COMMITTEE

To the 1935 House of Delegates:

Your Cancer Committee is happy to report an active and most successful year. Following the

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A. James Larkin, M. D.
Medical Director

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CHRISTY BROWN, Business Manager
PETER BASSOE, M.D., Consulting Physician

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ATTENTION DOCTORS!

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A most excellent climate for hay fever patients. Facilities for X-Ray and Radium service. Rates $14.00 to $35.00 per week. For Reservations address: Ashland General Hospital, Ashland, Wisconsin.

Dr. J. M. Dodd
President.

Jessie M. Shoolbred, R. N.
Superintendent.

A. H. Paton
Business Mgr.

meeting in Green Bay last year, when this committee, together with the cooperation of the program committee, presented a program on cancer which was composed of an address before the general assembly, a special sectional meeting and an exhibit, we began to plan for this year.

In a special meeting held in Madison the discussions brought us to the conclusion that any successful program for the control and prevention of cancer would have to involve two lines of activity: first, a postgraduate medical course for physicians; second, public education.

With these two purposes in view we decided to attempt to hold a series of cancer clinics in various centers throughout the State and in the evening following an afternoon of medical clinics to sponsor an address to the public on cancer. The centers selected were Racine, Appleton, Wausau, Eau Claire, La Crosse and Madison. The considerations in the selection of centers were convenience to the largest number of physicians, hospitals in which clinics could most conveniently be conducted, and finally locations where in the surrounding area there could be found the largest number of physicians who did not have in their midst institutions where large numbers of cancer cases are constantly under treatment.

Since the program would require the expenditure of more money than the committee had at its disposal, we decided to formulate an attractive program and attempt to pay all expenses out of registration fees paid by physicians attending the clinics. In other words, we decided to sell a clinical cancer program to the physicians. In order to do this it was necessary to secure the services of two eminent physicians in this country who are spending their time in the treatment of cancer in large institutions and a physician who is familiar with the presentation of this subject to the public. Accordingly, we were able to get Dr. W. P. Healy of the Cancer Memorial Hospital in New York City for clinics on cancer of the cervix and uterus; Dr. Ellis Fischel of the Barnard Free Skin and Cancer Hospital of St. Louis for clinics on cancer of the tongue, lip and breast; and Dr. F. L. Rector, Medical District Director for the American Society for the Control of Cancer, for the public address.

In order to inform the physicians of the state and to solicit their registration we secured the cooperation of the University Extension Division whose activity, together with the effective assistance given by Mr. Crownhart in the way of special letters and newspaper advertising, accounts for much of the success of the undertaking. Local physicians, who were responsible for the gathering of clinical material and the selection of suitable meeting places and also publicizing the clinics to their associates, contributed largely to our success.

The trip around to the six centers named above started in Racine on Monday, July 8th, and ended in Madison on July 13th. Everywhere we met with success. It was necessary to secure an average enrollment for each clinic of fifty physicians. In no center did we fall below fifty, the total number of physicians registered and attending the clinics being 379. The public lectures were well attended, the total number being between fourteen and fifteen hundred people.

The committee feels that this effort has clearly demonstrated that postgraduate medical courses can be taken to the physician in his own locality; and that since the control and prevention of disease requires the practice of a highly specialized technique on individual patients, it warrants more general use.

Respectfully,
W. D. Stovall,
Chairman.

COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

To the 1935 House of Delegates:

Apparently those functions coming under the consideration of this committee have been progressing efficiently and satisfactorily, consequently the committee has found no need for formal meetings this year.

However, we wish to take this opportunity to express what we are sure is the feeling of every member of the Society toward the changes at the University brought about by the death of Doctor Bardeen. The following paragraph from the July issue of our State Journal is well spoken: "Doctor Bardeen was a scientist, an educator and an administrator. To these three fields of activity he brought enthusiasm and rare judgment. He thought continually of the problems confronting the physician, the student and the patient. He never spared himself and he was as free of ostentation as is humanly possible. The many honors that came to him were thus tributes to his real ability." The loss of Doctor Bardeen has been and will continue to be keenly felt, not only by the profession but by the entire citizenry of the state.

The selection of Dr. W. S. Middleton as Dean of the Medical School we are sure meets with the heartiest approval of the members of our State Society. His excellent personal qualities as a man, his ever ready and friendly cooperation at all times, and his unusual ability as a clinician and teacher have gained for him a very warm relationship with, and high respect of the men throughout the state. The selection of Doctor Middleton is indeed fortunate.

Respectfully submitted,
J. W. Prentice,
Chairman.

COMMITTEE ON SCIENTIFIC WORK

To the 1935 House of Delegates:

The policy of having a list of doctors throughout the state available for the State Speakers' Bureau

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was continued during the year 1934-1935. The Chairman of the Committee has spent considerable effort in contacting the officers of the various county societies throughout the state, in order that any available material might be listed for program purposes. In all, approximately 53 doctors consented to be available for the Speakers' Bureau, and the list of these men, with their subjects, was on file with each county society.

At the present time there are no figures available as to how many men were called upon for service. There is no question that the availability of a list of doctors for this purpose is a distinct advantage to the various county societies in the arrangement of their programs, and the Committee strongly recommends that it be continued.

The Committee this year undertook the task of formulating the program for the next annual meeting at Milwaukee at an early date. Most of the invitations to speakers, both within and without the state, were sent out in January, February and March, 1935. With few exceptions, the men invited have responded promptly, and in many instances have expressed themselves as extremely willing to take part in this annual program. Special emphasis was placed upon the type of papers to be read in order that they might be of wide general interest to the practitioners of the state. It is to be hoped that the efforts of the Committee in arranging this program will be rewarded by a large attendance.

Respectfully submitted,
JOHN O. DIETERLE,
Chairman.

COMMITTEE ON MEDICAL ECONOMICS

To the 1935 House of Delegates:

Your Committee on Medical Economics has been active during the year that it might suggest to you at this session any change in the methods of delivery of medical service which would operate in the interest of the people, in the interest of the physicians, and which would prove to be progressive in the field of public health achievement. Your Committee held an all-day session with the Committee on Public Policy prior to the opening of the legislative session, and its chairman, together with the Secretary of the Society, has attended conferences in Milwaukee and Chicago with officers of the American Medical Association and of our own Council to promote the aims of the Committee. In addition plans of various types and from various sections of the State have been most carefully analyzed and studied.

That the entire membership might be made more fully conversant with factors underlying changes proposed from both within and without the profession, your Committee has sent to the entire membership and the Auxiliary during the year the following four publications:

1. Sickness Insurance Not the Remedy
2. Sickness Insurance Catechism
3. Sickness Insurance and Sickness Costs
4. Sickness Insurance and the Propagandist Foundations

The first three were published by the American Medical Association and furnished the Society by the Association without charge. The fourth was prepared and published by the Secretary of our own Society and proved of such interest that many hundreds of copies were ordered by other State Societies.

As will be related in the report of the Secretary, the Secretary made three special trips to Washington during the late fall and early winter. Extremely valuable information resulted therefrom which was placed in the hands of both the American Medical Association and members of our Committee.

In reporting on its accomplishments the Committee feels that it must use an unusual expression to denote the present status of its work,—"an effort to solve in the least erroneous method an insoluble problem."

That which the Committee suggests by this phraseology is that it is convinced that there is no one new "plan" now known to the Committee which will definitely promote the public health in this State. Your Committee feels that a very large part of whatever problem exists is a problem which can only be solved by continuous public education of the value of good medical care and its place in the family budget. Secondly, the solution of part of the problem involved must be and is dependent upon many other factors wholly beyond the control of the medical profession itself or as such. Such factors include legislation, government bureaus, problems revolving about the subject of poverty, unemployment, etc. These factors have been in a continuous state of flux in recent years which state of constant change further complicates any "plan" both in formation and operation.

Your Committee feels that the complexity of the general problem that is before it can best be understood by each and every member if he will read carefully the Special Report of the Bureau of Medical Economics of the American Medical Association as modified by the House of Delegates of the American Medical Association at the Atlantic City session. The Committee has accordingly arranged that each member shall have a copy of this most comprehensive and valuable report. These copies will be mailed direct from the office of the Secretary prior to September 1st, and the Committee commends to the membership a very careful reading of this concise and educational document.

The Committee feels that the membership should do some very clear thinking about all so-called "plans". There seems to be a tendency current among some physicians to look upon such proposals primarily from the viewpoint of increasing their personal incomes. While theoretically this would occur as a secondary result of a better distribution

PHYSICIANS' EXCHANGE

Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

WANTED—Position by young woman, 37, good appearance, able to meet people and handle busy medical office. Experienced collector, bookkeeper and stenographer. Twelve years experience private business and clinic management. Excellent references. Address No. 981 in care of the Journal. A

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WANTED—Internist, Mayo or equivalent, three to five years' special training. To associate with Mayo trained surgeon. X-ray knowledge desired. Wisconsin town of 15,000. Unusual opportunity. Also young assistant, general practice. State school, hospital, religion. Address No. 973 in care of the Journal. JJA.

WANTED—Physician to do locum tenens work for the months of September, October and November. Wisconsin license required. Address No. 978 in care of the Journal. JA

FOR SALE—Drugs, equipment, instruments, a late model ultraviolet ray, and zoalite, and medical library. Address Mrs. Beatrice T. Rice, Delavan, Wisconsin. JAS

WANTED—Capable, well-trained, eye, ear, nose and throat man to take over established practice in medium-sized city for period of about a year, starting September 1st. Possible permanent connection to right person. State all information and particulars in first letter. Address No. 979 in care of the Journal. A

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of medical service, it is also to be recalled that this is the one selling point which the Foundations have all used in their propaganda effort to convince the medical profession that compulsory sickness insurance should be adopted. We believe that plans should be studied on the basis of whether they will or will not perform a better service for the public. If they will, obviously the profession may expect a better return, providing that fees are not "frozen" by reason of their being fixed in depression years and the profession finds itself unable to change them as recovery is had progressively in the years to follow. Your Committee is of the opinion, however, that many of the premises upon which some plans have been sold to the profession involving larger incomes cannot be carried into effect and that the profession should not view any such plan with that thought as a primary point of attack.

Relative to the bill now pending in the Legislature (733 A) enlarging upon the charter powers of state and county societies for the formation of plans, your Committee will withold any comment until the disposition of the bill is known. A supplementary report will be presented from the floor concerning this subject.

Summarizing, your Committee now has no one plan or set of plans which it offers this House of Delegates as a method of improving the delivery of a good medical service, thereby promoting the public health. On the contrary, the Committee now believes that comprehensive plans will prove, in their operation elsewhere, to have been a mistake. It suggests, therefore, that the House be cautious in its approach to a most complicated problem which the Committee itself, after the most intensive study by its members, is still unable to present changes which do not carry within themselves such hazards as to make the change too dangerous for presentation.

Finally, your Committee would point out that in the scientific fields of medicine it is possible to experiment in the laboratory and, if the experiments therein prove unsuccessful, to discontinue such experiments without harm having occurred to any patient. In the field of social legislation, however, it is not possible so to experiment, and every unsuccessful experiment in the field of health service has, to the minds of your Committee, the very dangerous tendency to educate the people to demand that which the profession promised in its experiment, but which it was unable to fulfill. This tendency has been exhibited in every country which now has laws calling for compulsory health insurance in that in each such country the compulsory feature grew out of the unsatisfactory adjustments in voluntary insurance frequently offered by the profession itself. While the point may seem to be elementary, we respectfully suggest that experience is still our best teacher and we should be careful of that which we ourselves advocate lest we find ourselves in the position which brought about compulsory sickness insurance elsewhere.

Your Committee expresses its willingness and desire to study any suggestion by any member or to review any plan which may be presented to the House of Delegates.

Respectfully submitted,

PAUL FOX,
Chairman,
R. G. ARVESON,
W. G. RIOPELLE,

J. G. CROWNHART,
Secretary.

COMMITTEE ON HISTORY

To the 1935 House of Delegates:

During the year your special committee on history held a meeting at the home of the Chairman for the consideration of immediate projects. The committee felt that it should immediately undertake such work as could be accomplished without expense, particularly in securing and now preserving material that will be of great future value when the occasion arises to write of medical history in Wisconsin. In connection with our immediate efforts, the following steps have been taken:

1. Arrangements have been made with the State Historical Museum to act as custodian for both old instruments and old records. A special editorial to this effect was published in the July issue of the Wisconsin Medical Journal. The Secretary's office is contacting the families of all deceased physicians to the end that material of historical worth may be solicited for preservation.

2. The committee recommends that collection of historical data be made an important function of component county auxiliaries whenever and wherever created in Wisconsin.

3. Particular efforts will be made to obtain copies of medical histories of the adjacent states and to publish historical material in our Wisconsin Medical Journal.

4. Specific assignments have been made to several of our members who are particularly acquainted in a field of early history in Wisconsin. These members have been asked to prepare special material which will be either placed in our historical files or, preferably, published in future issues of the Wisconsin Medical Journal.

The Committee feels that this work is of importance and recommends that it be continued in the years to come.

Respectfully submitted,

F. G. CONNELL,
Chairman,
R. M. CARTER,
W. S. MIDDLETON,
G. E. SEAMAN,
J. G. CROWNHART,
Secretary.

EDITORIAL BOARD

To the 1935 House of Delegates:

The Editorial Board has made no material changes in the physical make-up of the Journal

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Medical Science Course The medical science course covers two years of college work in English, foreign language, physics, chemistry and biology and two years of work in the basal medical sciences, anatomy, histology, neurology, physiology, physiological chemistry, pathology, bacteriology, pharmacology, hygiene and diagnosis. This course leads to the B. S. degree.

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Courses in nursing are offered in the School of Nursing affiliated with the medical school. A residential course of 27 months is offered in the Wisconsin General Hospital to those who have completed a year of specified work in the College of Letters and Science. This course leads to a certificate of graduate nurse. A residential course of 27 months is offered to those who have completed three years of college work in specified subjects either in the College of Letters and Science or in the Department of Home Economics. These courses lead to a certificate of graduate nurse and to a B. S. degree.

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since that which was reported last year. These changes we still feel have added very materially to the attractiveness and desirability of our Journal. Many favorable comments and discussions are still heard in this respect. Some recent suggestions for changes in the physical make-up of the Journal to increase its attractiveness have been proposed. These matters have not, as yet, been brought before the Board for formal action.

There has been a continued effort to increase the amount of space allotted for scientific material and we have found by comparing the amount of space allotted to scientific material in our Journal with many other representative medical journals that in only one or two instances is our amount of space exceeded. With this increased amount of space devoted to scientific material, the medical editor has been able to dispose of practically all papers which have been held for some considerable time for publication so that in the future the Board hopes to be able to accept and publish promptly contributed articles. Following the last state meeting, the medical editor reported that the articles submitted were of a very high class type and excellently prepared. The Editorial Board appreciates the efforts of the program committee in obtaining such high class individuals as contributors.

The Editorial Board has continued its efforts to obtain more contributors from the membership throughout the state to our editorial columns. While there has been some increased response, the Board wishes that more of our members would prepare and contribute editorials.

The medical editor states that he has sufficient number of edited articles to provide publications until the articles read at the State meeting in September are presented for publication. He states that he feels the material published during the past year was of more than average quality.

The business manager of the Journal will no doubt in his report call your attention to the organized efforts now being made to secure for our Journal more advertising. As has been previously pointed out, advertisers in the pages of our Journal must meet and satisfy certain standards. The members should appreciate, therefore, the unusual efforts which are necessary to obtain this type of advertising. We trust that the managing editor's efforts will be successful in increasing the income of the Journal. We need not point out the great benefits that would accrue to the Journal from an increase in its income.

May I repeat that a glance at our Journal should convince one that it is among the highest type of medical journals. It is the earnest endeavor of the Board to continue to keep the Journal in such a high rank. In order to do this, the Board requests and would welcome suggestions or criticisms from the members of the State Society.

Respectfully submitted,

GEORGE H. EWELL,
Chairman.

Hobby Exhibit Planned For Milwaukee Meeting

Mrs. Eben J. Carey of the Woman's Auxiliary has been appointed Chairman and Mrs. Charles Fidler, Vice-Chairman of a special hobby exhibit demonstrating the various fields of hobbies of members of the Medical Society of Milwaukee County.

Assisting Mrs. Carey and Mrs. Fidler is a large committee of the Auxiliary. It includes Mrs. Irwin Schulz, Mrs. R. E. Fitzgerald, Mrs. Theodore Wiprud, Mrs. W. P. O'Malley, Mrs. W. T. Kradwell, and Mrs. John A. Froelich.

Thirty-six exhibits including paintings, etchings, an amateur broadcasting station, wood-working and handicraft, stamp collections, pheasants, model ships, and metal work have already been arranged. The exhibits will be held in Juneau Hall in the Auditorium directly across from the commercial-scientific exhibits and the registration booth.

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TABLE OF CONTENTS PAGE 604

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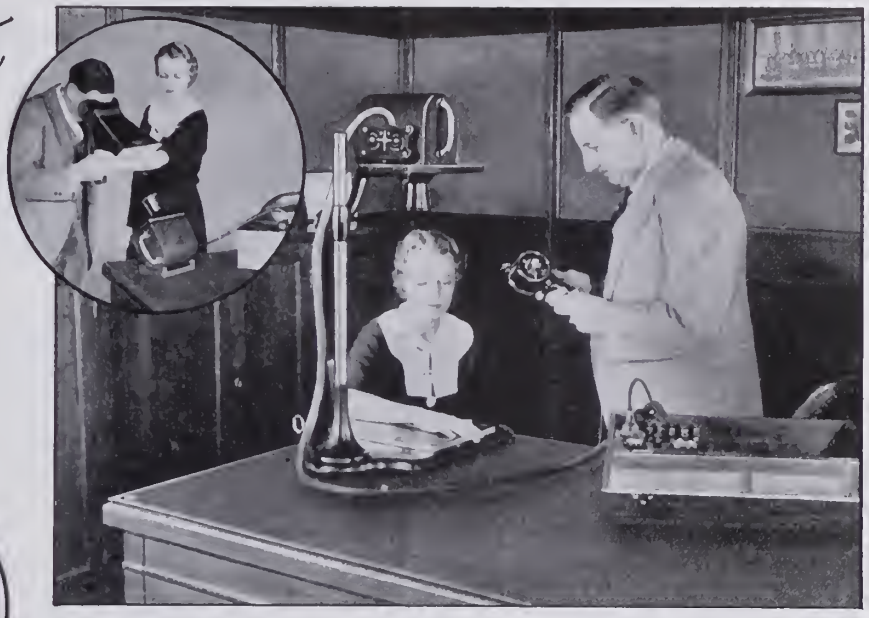

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Volume XXXIV
Number 9

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TABLE OF CONTENTS

ORIGINAL ARTICLES

Page

A New Procedure for Lumbar Puncture by Hans H. Reese, M.D., and Irving B. Shulak, M.D., Madison ---- 613
Hyperleucocytosis in Pneumonia; Review of Literature and Case Report by B. J. Birk, M.D., and Norman De Nosaquo, M.D., Milwaukee ---- 615
Tuberculosis of the Spine by Chester C. Schneider, M.D., and Leander Van Hecke, M.D., Milwaukee ---- 618
Cancer of the Breast by Arthur W. Erskine, M.D., Cedar Rapids, Iowa ---- 623
Tumors of the Mammary Gland by T. J. Snodgrass, M.D., Janesville ---- 624
Thyroid Diseases in Children by K. H. Doege, M.D., Marshfield ---- 627
Malignant Neutropenia; Case Report by Maurice Hardgrove, M.D., Milwaukee ---- 630
Radiation Therapy in Medical Practice. IV. Leukemia, Hodgkin's Granuloma and Allied Diseases by Ernst A. Pohle, M.D., Madison ---- 632
Are We Satisfied With Our Wisconsin Infant and Maternal Mortality Rates? by Amy Louise Hunter, M.D., Madison ---- 636

EDITORIALS

Page

Dr. Louis Francis Jermain (1867–1935) ---- 640
Oxygen Therapy ---- 641

MISCELLANY

President's Page ---- 642
Society Proceedings ---- 643
Woman's Auxiliary ---- 643
News Items and Personals ---- 645
Radio Program ---- 645
Births, Marriages, Deaths ---- 646
Society Records ---- 647
Annual Meeting, Milwaukee, September 17–20 ---- 647
Alcohol Regulations and Permits; Official Statement by Hon. Robert K. Henry, Madison ---- 655
Nearly 400 Attend Cancer Clinic ---- 656
Report on Legislative Work of the Committee on Public Policy ---- 657
Malpractice in the Use or Non-Use of the X-Ray by Robert R. Freeman, LL.B., and Ronold A. Drechsler, LL.B., Milwaukee ---- 673
One Hundred and Fourteen Licensed ---- 680
Journal Book Shelf ---- 684
Book Reviews ---- 686
Exchange Advertisements ---- 693

[Entered as second class matter, June 30th, 1903, at the Post Office at Milwaukee, Wis., under Act of Congress March 3rd, 1879. Transferred to Madison, Aug. 1st, 1929.]
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(1) Journal American Medical Association, 90, 469, 1673 (1928)

(2) Preventive Medicine and Hygiene, M. J. Rosenau, Appleton-Century Co., N. Y. 5th Edition

(3) Food-Borne Infections and Intoxications, F. W. Tanner, Twin City Printing Co., Champaign, Illinois

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THE WISCONSIN MEDICAL JOURNAL

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A New Procedure for Lumbar Puncture

By HANS H. REESE, M. D., and IRVING B. SHULAK, M. D.

Wisconsin Psychiatric Institute, Madison

RECENTLY we became interested in the so-called "Forced Drainage of the Central Nervous System", a treatment recommended for chronic disorders and subacute infections of the central nervous system. In 1926 Kubie noted that intravenous injections of isotonic or hypotonic sodium chloride solutions, which were given when the spontaneous flow of cerebrospinal fluid had almost ceased, were accompanied by a renewed outflow of fluid. By means of detailed experimentation, fully described in Kubie's paper[1], he has proven that there was no harmful rise in the intracranial pressure in normal dogs during these intravenous infusions of hypotonic solutions provided the cerebrospinal fluid was allowed to drain freely at the same time the injection was given.

It was also noted[2] that when cerebrospinal fluid was examined cytologically, the proportion of lymphocytes to other cells was higher in later fractions than in the fluid which drained first. The injection of hypotonic solution caused the percentage of lymphocytes in the newly formed cerebrospinal fluid to mount even higher, and microscopic preparations of the central nervous system of these animals showed that there had been a widening of the perivascular fluid pathways by hidrosis and an extrusion of lymphocytes from cerebral foci and perivascular exudates into the subarachnoid spaces[3]. This phenomenon suggested that such a "washing out" of the central nervous system by forced perivascular drainage (George M. Retan)[4] would at the same time carry with it toxic products and thus influence locally, by increased tissue metabolism, favorably the course of infectious diseases of the central nervous system.

Forced drainage by means of hypotonic salt solutions is based on the principle of lowering the osmotic pressure of the blood stream which fact disturbs the osmotic action of the nondiffusable colloids of the blood and the cystalloids, thus favoring finally also an increased production of spinal fluid. The accelerated production of spinal fluid takes place both at the choroid plexus and by active transudation or hidrosis from the capillaries of the tissues throughout the brain and spinal cord[5].

These points and many other interesting observations are described in papers by L. S. Kubie, G. M. Retan, E. G. Zabriskie and C. C. Hare[6].

We have been using forced drainages at the Wisconsin Psychiatric Institute, but our data so far are insufficient to permit deductive interpretation of our clinical results. A forthcoming report will analyze our clinical results and recommendations. An outstanding observation during these therapeutic procedures was the fact that even though in some cases as much as 100 to 120 c.c. of spinal fluid was withdrawn, and the patients allowed to get up a few hours after the completion of the process of forced drainage, no subjective or objective evidences of post punctural headaches occurred. This observation suggested at once a practical application of combating post punctural headaches from which many patients suffer if allowed to get up too early after a spinal puncture.

If we can protect our patients from post punctural headaches by a new method, without subjecting them to 24 to 48 hours hospitalization for that procedure, it would prove to be very practical and economical, ultimately permitting the performance of a lumbar puncture as an uneventful ambulatory procedure.

It is a known fact that almost 100% of patients with relatively normal central nervous systems and balanced cerebrospinal fluid

dynamics develop severe and lasting headaches if allowed to get up immediately after a spinal puncture. However, even with the precaution of 24 to 48 hours of bed rest, a number of patients, 5 to 10% in our series, complain of variably severe post punctural after effects. Commonly headaches—early or late—may be of mild frontal and occipital type or only as a feeling of heavy pressure over the vertex; they may be accompanied by nausea, dizziness, pounding sensation, and sometimes by vomiting attacks upon change in position. They are very resistive to ordinary means of treatment such as cold compresses, medication, and even pituitrin, but are relieved by lying down, especially when the foot of the bed is elevated. Headaches may last from days to weeks, incapacitating the patient physically and financially.

A physiologic explanation of this syndrome is, perhaps, the creation of a partial vacuum in the spinal canal with subsequent irritations of the medulla and of the ventricles in the posterior fossa, so that when the patient is in the upright position there is not only an alteration in general cerebrospinal fluid equilibratory dynamics, but actually periventricular irritation, which as has been brought out above induces the nausea and vomiting. Cases of sudden death due to "jamming down" of the medulla into the foramen magnum have been recorded, where lumbar punctures have been performed injudiciously on patients with increased intracranial pressure.

It is a common observation that syphilitic patients with positive serology in the spinal fluid are relatively free from post punctural headaches. Same is also true of patients who have some alteration in their cerebrospinal fluid system such as seen in post traumatic encephalopathies, post encephalitic Parkinson's syndromes, hydrocephalus, and other conditions of the central nervous system resulting in an abundance of cerebrospinal fluid.

NEW PROCEDURE

From the experimental study, which has been sustained in many instances, we are presenting our new procedure of lumbar puncture. We recommend giving the patient hypotonic saline solution 5 to 10 minutes before the spinal puncture is performed. Fifty c.c. of .225 saline given intravenously is sufficient. After the spinal puncture is performed, the patient is kept quiet for one hour and then allowed to get up. The following table presents the statistical record of our observations with this procedure.

Type of Cases	Number	Headaches	Duration of Headaches
Involution	3	None	----------
Post Encephalitic Parkinson	3	None	----------
C. N. S. Lues	3	None	----------
Post Traumatic Encephalitis	2	None	----------
Tic Douloureaux	1	None	----------
Myasthenia Gravis	1	None	----------
Multiple Sclerosis	3	None	----------
Psychoneurosis	5	None	----------
Chronic Alcoholism	2	Slight frontal-1	Eight hours
Dementia Precox	1	None	----------
Hematomyelia	1	None	----------

It is evident from the chart that the post punctural headaches in this group of patients were completely eliminated by this new method. Only one patient complained of a slight frontal headache lasting for approximately eight hours. It is difficult to say in this instance whether the headache was the result of the spinal puncture or whether it was merely a manifestation of excessive indulgence in alcoholic beverages (wet brain symptom).

In order to demonstrate whether hypotonic saline is of therapeutic value after post punctural headaches have occurred, we have performed lumbar punctures without giving the preliminary hypotonic saline and then allowed the patients to get up and walk about one hour thereafter. As soon as post punctural headaches occurred, 50 c.c. of .225 saline were given intravenously. We find that with this procedure the responsive improvement was variable. Some patients were definitely benefited, the headaches disappearing approximately one-half hour after the injection of the hypotonic saline solution. Another group of patients showed response to this procedure insofar that the headaches were not as intense as before the saline injection and the duration of the headaches was definitely shortened. A few, however, showed no appreciable response to this treatment, the headaches continuing even after the injection of the hypotonic saline.

Therefore, our best results were obtained

when the hypotonic saline was given 5 to 10 minutes before the spinal puncture.

CONCLUSION

(1) A patient receiving 50 c.c. of .225 saline solution intravenously 5 to 10 minutes before the lumbar puncture presents no evidence of post punctural headaches, as observed in a group of 25 patients, even if allowed to be up and around one hour after the withdrawal of cerebrospinal fluid.

(2) This new procedure for lumbar puncture is of economic importance to the patient.

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Hyperleucocytosis in Pneumonia; Review of Literature and Case Report

By BENJAMIN J. BIRK, M. D., and NORMAN DeNOSAQUO, M. D.

Milwaukee

IN THE study of pneumonia, the leucocyte count has not been given the necessary consideration for a number of years. Chatard states that Virchow and Nasse, Sorenson, Boeckman, Tumas, Hayem, Limbeck and Billings have written on the subject[2]. These workers were interested in the relationship of the leucocyte count to the etiology, pathology, course and prognosis of the disease. Later writers, including Ewing[5], Cross[3], and Chatard[2], focused their attention upon the leucocyte count as a separate entity in their consideration of pneumonia.

Boeckman, as reported by Chatard[2], stressed the fact that the disease had an associated leucocytosis; Limbeck maintained that there was a relationship between the leucocytes and the severity of the disease—noting the onset of leucocytosis before the inflammatory exudate and a fall in leucocytes with the crises; Rieder held that the number of leucocytes depends on the intensity of the infection and the resistance of the patient more than on the degree of fever and the extent of the exudate.

Ewing[5] pointed out that Van Jaksch, in studying the prognostic value of the leucocyte count, showed that pneumonia unaccompanied by leucocytosis meant a poor prognosis; and that Laehr made mention of the fact that a relapse of the disease was heralded by a new rise of the leucocytes. Ewing found that frequent counts were unnecessary in the study of the relationship of the count to prognosis as had been maintained by Laehr.

In 1893, Ewing[5], discussing the significance of the leucocyte count, noted that the greater part of the work had been done in lobar pneumonia of the febrile type. His work corroborated the importance of the leucocytosis to prognosis. His observations are as follows:

> "Well-marked leucocytosis, while in itself a favorable sign, does not assure that the disease will pursue a favorable course, but indicates usually a severe infection .... A moderately low degree of leucocytosis in severe cases of lobar pneumonia is an extremely unfavorable sign .... In severe cases of lobar pneumonia, absence of leucocytosis indicates with rare exception that the disease will prove fatal."

Emerson[4], in his text "Clinical Diagnosis" (1906—Lippincott Company), studied the cases in their institution only in relation to the leucocyte count. He was not able to demonstrate the initial hypoleucocytosis as described by Pick. He felt that the classification of Cabot was sufficient, as below:

1. Good resistance—mild infection—recovery.

2. Good resistance—severe infection—recovery in 90% of cases.

3. Poor resistance — severe infection — fatal.

Emerson noted that in fatal cases the leucocyte count may not rise considerably but that the polymorphonuclear count may rise. He agrees with other writers that a high count does not give any idea of the prognosis of the case. He noted that the fall in the leucocytes may come before, with, or after the fall in temperature; and that the normal leucocyte count appears on the second day after lysis or crises. Emerson found that age, sex, and the extent of the consolidation had no relation to the degree of the leucocytosis in uncomplicated cases. Of the 163 uncomplicated cases studied, five ended fatally, one of which had a count of 1700. Of the remaining cases which recovered, one patient had a count of 105,000. In the course of the series, daily variations in the counts were found to be between 4,000 and 6,000, being less marked when the temperature was constant and most marked with irregular temperature, but always showing the same variation as the mean average before and after the crises.

The Johns Hopkins group made a comprehensive study of pneumonia during the years 1909 and 1910. Chatard[2], reviewing the leucocyte studies in acute lobar pneumonia for the "Johns Hopkins Reports", found that in 582 cases, 350 cases had a count of 15,000 to 35,000; that the mortality was high when the count fell below 10,000 but decreased to a minimum between 20,000 and 30,000, and remained fairly constant only to rise again when the count rose above 60,000. In this series, there were only two cases in which the count rose to 95,000 and 105,000, both of which recovered. Chatard reported 50 cases between one and five years of age which had a count of not less than 10,000 or over 50,000, and three cases in the same age group with counts above 50,000; the mortality rate for the entire group was 7.5%. In 178 cases between the ages of 20 and 30 years, the leucocyte count varied between 10,000 and 50,000 with a mortality of 15%; 10 cases with a count below 10,000 had a mortality of 33.3%; and the 14 cases with a count above 50,000 had a mortality rate of 57.1%. It was interesting to note that all cases above 55 years of age who had leucocyte counts below 15,000 ended fatally. Chatard concluded that there was no connection between sex and race to the grade of leucocytosis or the mortality; that there was no connection between the death rate in summer months and the degree of leucocytosis; that the number of leucocytes begins to fall just before the fall in temperature, being quite rapid in true crises, gradual in protracted crises, variable in pseudocrises, and slower or following the temperature curve in lysis.

Cross[3] analyzed 400 cases of lobar pneumonia in the Middle West in 1915 and found that the mortality rate was 132.4 deaths per 100,000. The tabulation of the percentage of cases against the leucocyte count of the groups is as follows:

under–10,000	9.0%
10,000–15,000	30.0%
15,000–20,000	22.0%
20,000–25,000	21.0%
25,000–30,000	10.0%
30,000–35,000	3.0%
35,000–50,000	1.0%
above–50,000	2.5%

Cross was interested in the relationship between the leucocyte count and the course of the disease; therefore he excluded all patients under the age of 14 years and all cases with complications, especially suppurative conditions. The following chart will show to better advantage the results of this study:

Leucocyte count	lysis %	crises %	deaths %
5,000–10,000	38.8	27.7	33.3
10,000–15,000	44.0	32.0	24.0
15,000–20,000	41.6	39.1	18.9
20,000–25,000	38.8	38.8	22.4
25,000–30,000	57.1	28.5	11.3
30,000–over	33.3	55.4	11.3
	41.6	36.9	21.2

It is reasonable to conclude that the above chart would be of a different character if the cases eliminated from the study had been included. It is interesting to note that this series corroborates the work of earlier investigators in cases in which the leucocyte count was under 10,000. It will be noticed that as the count increases within the range of from 15,000 to 25,000, the mortality rate

hovers at about 22%, which is close to the average; while in cases with a count above 25,000, the mortality rate drops to 11.3% or about one-half the mean average. Cross concluded that: "As far as the mortality from lobar pneumonia is concerned, the higher the white count the better the prognosis," and that "a leucocyte count of 25,000 or over is decidedly more favorable than one under 25,000." It is also noted that the number of cases ending either by lysis or crises up to a count of 25,000 is practically the same; but between 25,000 and 30,000 the majority of cases are likely to end by lysis while above 30,000 they are likely to end by crises, althoug the mortality rate in both groups is the same.

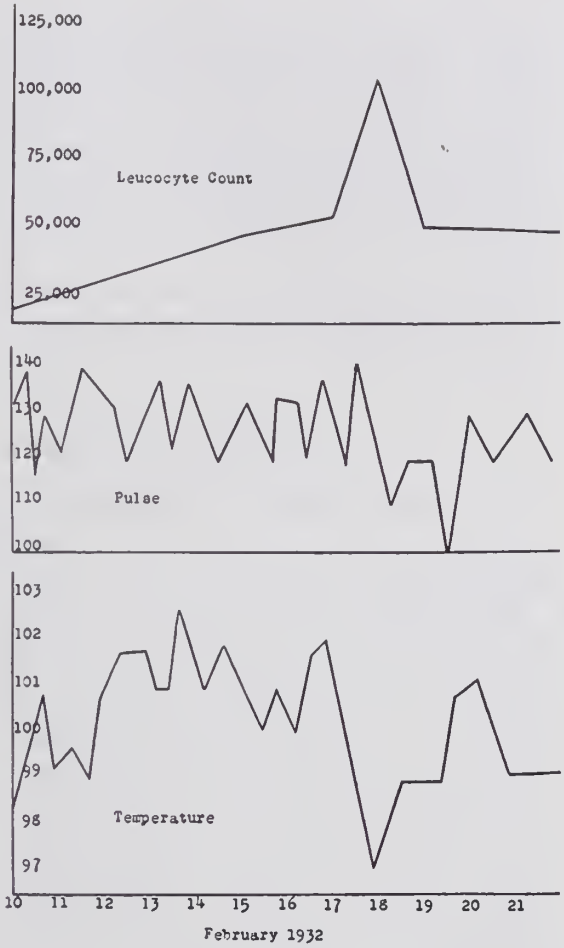
REPORT OF CASE

Mrs. L. M., aged 37 years, was seen for the first time on February 10, 1932, at which time the history was as follows: The patient had had a severe cold for about a week or ten days, and had not consulted her physician. On February 8, 1932, her physician was called and she was ordered to bed, where she was seen in consultation by one (B.J.B.) of us. Her past medical history was essentially negative except for two Caesarean sections.

The physical examination revealed a pneumonic process involving the middle lobe of the right lung and the upper lobe of the left lung. The patient showed evidence of marked circulatory collapse and immediate hospitalization was advised.

She was moved by ambulance to a hospital, and placed in the oxygen chamber directly upon arrival. The temperature curve was atypical, hovering between 99° and 102°. The pulse rate varied from 120 to 140 per minute; while the respiratory rate maintained an average of 24 per minute until the seventh hospital day when the average gradually rose until death on the twelfth day. On the seventh day there appeared slight cyanosis and a rattle in the throat, with a mild diarrhea. On admittance, the patient was semi-comatose, but on the fourth day seemed more rational until the tenth day when she again became lethargic and had frequent involuntaries of both bladder and bowel. The patient became progressively worse, and expired within forty-eight hours.

The laboratory examinations were as follows: Urinalysis—high specific gravity, amber color, acid reaction, trace of albumen, casts, epithelial cells, and few erythrocytes and leucocytes. The erythrocytes in the complete blood examination varied from 2,830,000 to 3,820,000. The leucocytes on the first hospital day were 24,000, and gradually rose until the seventh day when the count was 106,550, from which point they dropped to 51,600 at exitus. The polymorphonuclear cells maintained an average count of 90 cells per 100 throughout the course; no large lymphocytes were found, and the small lymphocytes continued at an average of 3 cells per 100; one to two monocytes were found, and toward the end, one to two neutrophilic myelocytes and one to three metaphilic myelocytes. On entrance, the platelet count was decreased, but by the seventh day it showed an increase above normal which level was held until 24 hours before death, when it again decreased. Anisocytosis and poikilocytosis did not appear until the last day of life. The examinations of the sputum revealed no acid-fast organisms, but there were cocci in pairs, groups, and chains, with many pus cells and a few bacilli. The blood culture showed no growth up to four days. Roentgenologic examina-



The most interesting point brought out in the above chart is the series of events on the eighth hospital day. On this day, the leucocyte count rose to 106,550 and the temperature dropped to 97°; and the pulse rate, which, up until this time, had followed the rises and falls of the temperature curve, did not fall with the temperature but rose to a high level.

We have reported a case of hyperleucocytosis in pneumonia, with a review of the literature. In accordance with the findings of those investigating this field, as pointed out in the literature, our case also was terminated by death.

tion taken on February 10th showed the following: "patchy infiltration of the right mid-chest with apex and base relatively clear. Infiltration of left upper chest . . . . Diagnosis—bilateral bronchopneumonia"; and the examination on February 16th showed: "Extensive bronchopneumonia of the middle portion of the right lung and the left lung is involved in its middle portion, but to a slightly lesser extent. The process seems more marked than on previous examination."

The patient apparently had done well until the seventh day when there was a marked change in the general condition along with the concurrent aforementioned laboratory findings. The patient expired on the twelfth hospital day.

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Tuberculosis of the Spine*

By CHESTER C. SCHNEIDER, M. D., and LEANDER VAN HECKE, M. D.

Milwaukee

ALTHOUGH intensive public health propaganda and education have effectively diminished the incidence of tuberculosis throughout the nation, this disease still presents a most formidable menace to the human race. Among the disastrous complications of systemic tuberculosis is tuberculosis of the bones and joints, and in this latter group the spinal column is the most common site, being observed in about one-third of the cases of bone tuberculosis. This disease is no respecter of age or social station occurring from infancy to senility in any walk of life. It is most commonly observed under 30 years of age, however, and its greatest incidence is in the first decade.

Tuberculosis of the spine is insidious in onset and usually runs a prolonged course before a correct diagnosis is made and proper treatment instituted. Of 865 cases seen and treated by Albee[1], 33% had symptoms from 5 to 30 years and only 19 per cent were ill for less than one year. Doub and Badgley[2], in reviewing 100 cases, found that the average duration of symptoms in their series was 6½ years, Henderson[3] found it to be 3 years, and at the Milwaukee County Hospital, the duration of the entrance complaint averaged 17 months, and the disease itself must have been present much longer than that. Although it is true that pain in the back is the most common complaint in these cases, being noted in 81 per cent in our series, this is not by any means the only or most dependable symptom. Turner[4] summarized the important symptoms of tuberculosis of the spine under two groups, the general and the local. Under the former, anaemia, anorexia increased pulse, loss of weight, evening temperature, and night sweats were noted; while in the latter, pain (local and referred), tenderness (local), rigidity (muscle spasm), deformity, abscess, and nerve pressure were deemed the most important. Without going into detail concerning the elicitation of these symptoms and signs, it might be pertinent to emphasize that every spinal or peripheral nerve symptom-complex merits careful study. These patients should be stripped and examined with care. Inspection, palpation, and searching inquiry with careful cataloging of all the evidence will frequently be rewarded with an early diagnosis of this most destructive disease. In this connection it might be stated that the obligatory presence of "hunchback" for the diagnosis of spinal tuberculosis must be eliminated from the mind of the practitioner because this sign occurs early only in dorsal tuberculosis while its presence in cervical and lumbar disease indicates most advanced vertebral destruction. Deformity is often lacking in the early cases, being seldom the entrance complaint. It must regretfully be regarded as one of those things which occurs in the face of delayed diagnosis and consequently poor therapy. It is seen in less than 35% of the cases and in these more or less marked vertebral collapse

* Presented before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, Sept. 1934.

has already occurred. An early diagnostic sign recently described by Kofman[5] of Odessa is worthy of consideration. This sign, called the dimple sign, is a manifestation of the immobility, the arrest in motion of the affected segment of the vertebral column, an indication of the lost flexibility of the vertebral discs, or, more correctly speaking, the lost elasticity of the nuclei pulposi. The dimple formation is to be interpreted as a preliminary stage of the gibbus which frequently does not develop at all or does not appear until many years later. The sign is detected by placing the patient on a firm, level table with his back toward the source of light and requesting him to hyperextend his spine. On inspection, the non-participation of the affected segment of the vertebral column in this movement produces a depression, fossa, or dimple at the diseased site. The author of this sign states that it appears much earlier than other symptoms and it has proved very serviceable to him in the early diagnosis of this disease. Along with this sign the decrease of the physiological lordosis of the cervical and lumbar portions of the spine may be observed. Suspicion of spinal disease based upon the presence of one or more of the foregoing symptoms and signs should, of course, suggest the need of careful radiographic study.

Doub, in analyzing the characteristics of spinal tuberculosis as revealed by the x-ray, observed three types of involvement of the vertebral body, the central, the interarticular, and the anterior. In the central type the organisms enter through a branch of the posterior spinal artery and involve first the central portion of the body of the vertebra. This area of destruction gradually extends until most of the vertebral body is involved and finally collapses. Later the intervertebral disc becomes destroyed and extension to the adjacent vertebrae takes place. This type of involvement is most frequently found in the dorsal region in children under 12. In the intervertebral articular type the infection occurs through the epiphyseal arteries at the articular margins with early extension to the intervertebral disc. Narrowing of the disc with early involvement of contiguous vertebrae is one of the first x-ray signs. Later vertebral collapse occurs. This type is more common in the lumbar area. In the third or anterior type the infection occurs through the branches of the intercostal artery entering through the anterior longitudinal ligament. In this type the disease spreads to several contiguous vertebrae early, invading the bodies. It has been found that in most cases the earliest demonstrable roentgen change is narrowing or obliteration of the disc. In 83% of cases Doub found complete disappearance of the disc, and in 17% it was definitely narrowed. This early involvement of the disc completely alters the mechanics of the spine (Calve[6])—it is no longer an elastic column because the pivoting axis, the nucleus pulposus, has disappeared. This structure once destroyed, a new more posterior axis of pivoting, the articular apophysis, appears. Pott's disease creates a posterior hinge at the level of the column of arches. While normally the spinal column is a continuous elastic column, there is a true solution of continuity at the level of the tuberculous focus. The anterior vertebral column is ruptured and forms two segments, one superior and the other inferior. These segments are only united by the posterior arches and the articulations between these arches. These latter articulations form a true, transverse retrosomatic hinge. The weight transmitted by the upper vertebrae of the focus is applied directly to the body of the subjacent vertebra, the maximal weight being transmitted to the anterior portion of this bone. This condition is very unfavorable and the destruction due to compression increases thus allowing the disease to progress.

COMPLICATIONS

Among the complications of Pott's disease, active tuberculosis of the lungs, genito-urinary tract, other bones, abscess formation, meningitis, and paraplegia are frequently noted. Of these paraplegia warrants special consideration. Whitbeck, quoted by Sharpe[7], who has had an unusually large experience in the treatment of spinal tuberculosis, estimates that 5–8% are complicated by some degree of nerve involvement. Cord involvement may be due to abscess formation, pachymeningitis, granulation tissue under the pos-

terior longitudinal ligament, edema, bone compression or blood vessel obliteration with secondary cord softening. It is most commonly observed in the thoracic region and occurs as frequently in children as in adults. Most observers feel that with few exceptions, paraplegia should be treated conservatively with recumbency in hyper-extension, relief from this symptom being accomplished in over 85% of cases with such measures. Laminectomy and costo-transversectomy should be reserved for intractable cases which fail to respond to immobilization for one year or longer. Even with this treatment the prognosis is not good.

Some confusion occasionally arises in differentiating tuberculosis from conditions which may simulate it. In vertebral fractures the intervertebral disc is more resistant to injury than the vertebral bodies; even in severe impaction the cartilaginous interspace tends to retain its normal depth as the bone is crushed down. Usually the lower margin of the vertebra retains its normal crisp uninterrupted line. The impacted vertebra almost invariably shows collapse of its upper margin only, according to Potter[8], with some irregularity of this surface and anterior projection of bone. In vertebral disease the contrary is most often true. There is a strong tendency for the disease to invade the joint at an early period and this disease rapidly destroys the fibrocartilage and by extension invades the adjacent vertebral bodies. This produces collapse in which the interspace is reduced in size and the joint margins are ragged and irregular.

Sarcoma of the bony arches, especially if there is much bone erosion, may present an x-ray picture that much resembles that of tuberculosis. As a rule the pain in sarcoma is more severe and the spinal deformity is absent or develops much later than in caries. The nerve pain of sarcoma is not relieved by immobilization of the spine in plaster or on a frame, while such measures abolish pain in caries as a rule.

Osteomyelitis follows various infectious diseases or suppuration elsewhere in the body, occurs occasionally in the vertebrae, and at times is accompanied by cord involvement. The high temperature, the severe prostration, and the presence of foci in other bones enable one to distinguish osteomyelitis from vertebral tuberculosis.

Typhoid spine may occasionally present a picture which resembles tuberculosis. This condition is always preceded by the disease typhoid fever and develops within weeks or months of the acute febrile stage of the disease. In the vast majority of instances the affection is located in the lumbar spine or in it and the immediately adjacent thoracic or sacral vertebrae. Commonly only two adjacent vertebrae are involved, though, rarely, several may be. It follows an acute febrile course with severe local and referred pains. The x-ray demonstrates resorption of the intervertebral disc and slight destructive changes in the bodies of the vertebrae in the earlier stage; later, bone proliferation from the periosteum and bone deposition along the lateral ligaments producing firm bony ankylosis of the approximated adjacent vertebral bodies. The disease runs a relatively short course of months and invariably results in complete cure.

Many other conditions of the spine, both developmental and pathological, may at times simulate spinal tuberculosis but in almost every instance careful clinical and radiographic study will readily establish their identity. Evans[9] of the Harper Hospital, Detroit, has recently described these conditions in a comprehensive study of the subject. His article should be read by anyone interested in the spinal column.

TREATMENT

Having once definitely established a diagnosis of spinal tuberculosis, treatment must be undertaken with due regard to all the factors involved. Consideration must be given to the general management of the disease, tuberculosis, and to the local control of the destructive process in the spine. That rest, good food, sunshine, fresh air, and a high vitamin diet are fundamentals in the care of these patients need scarcely to be emphasized here. Every possible influence designed to build up the resistance of the patient and improve his general physical condition must be employed not only during the active management of the acute stage but indefinitely there-

after. There is no specific for tuberculosis which in the final analysis must be cured by the patient himself through all natural influences.

In the spine the essential factor is rest to the part best secured by recumbency and proper back support with or without surgical intervention. Operative fixation consisting of a graft or fusion is superior to mechanical support by brace or cast because it is close to the lesion, increases with time, cannot be removed, does not need adjustment from time to time, and decreases the length of treatment. Pasman[10] states that in order to cure a tuberculous focus through simple rest, a period of 4 or 5 years is generally required in the case of adults. An immediately effective and complete immobilization can be accomplished only by internal fixation of the spine. Albee has pointed out that the cast cannot be fitted closely enough to maintain immobility of the spine—it seriously restricts the movements of the thorax and abdomen, and interferes with the oxidation and nutrition on which so much depends in the treatment of tuberculosis. The Bradford frame and traction require protracted inactivity of the patient. Conservative methods are of doubtful efficacy under circumstances more or less inimical to the general health of the patient. Henderson is of the opinion that ample evidence has accumulated to show that operation can, and usually does, accomplish ankylosis and it is now firmly entrenched as a more or less standard procedure in the treatment of tuberculosis of the spine in adults. The results are not so quickly attained, however, as to warrant allowing it completely to supersede the older and established methods of splintage and support by the aid of apparatus. These appliances should be used also to prevent strain on new callus formation and hasten the ankylosis; they are abandoned only when the patient is free from all symptoms. There is no doubt that under favorable conditions the operation shortens the convalescence, thus saving the patient's time.

The question of whether to operate on children has not yet been satisfactorily answered. Outstanding orthopedists throughout the world differ greatly in their opinions concerning its value in this group. Albee, Hibbs[11], Ely[12], and others have advocated and performed operations at all ages with outstanding success, while Henderson, Campbell and many others do not operate before puberty. Kite[13], in comparing the results in 50 cases treated conservatively as against 50 treated with operation, obtained vastly superior results with operation. Kidner[14] reporting on two groups of seven each with and without operation was unable to detect much difference between the period of treatment necessary and the results attained.

Of the surgical procedures designed to accomplish internal fixation of the spine, the bone graft of Albee and the fusion of Hibbs were introduced first (1911) and are the best known and most commonly employed. Albee stresses the point that the graft is a less severe operation than the fusion and can be performed in individuals unable to withstand the more severe attack. It also requires less osteogenetic power of the fused vertebrae than the fusion. His practice is to operate on any patient at any age providing the surgical risk is good. He unites by graft two normal vertebrae above and below the diseased vertebrae in the dorsal region—one above and below in the lumbar region. The fusion of Hibbs has the single advantage of being adaptable to any amount of deformity and of being less susceptible to refracture, than is the graft.

In 1924 Lewin[15] proposed a combination of the Hibbs' fusion and Delageniere osteoperiosteal wafer graft accomplished by superimposing two parallel osteoperiosteal wafers from the tibial cortex on a standard Hibbs' fusion. The advantages anticipated by him and subsequently realized by others were quicker and more complete solidification of the graft and reduction of the danger of pseudarthrosis. One of the writers (C.C.S.) has performed this operation in a small series of cases and has observed an unusually massive deposition of bone in the fused area. The addition of the osteoperiosteal wafer to the Hibbs' fusion in our experience markedly increases the amount of fused bone and introduces an uninterrupted, highly osteogenetic substance which assures continuity of the fused bony mass. Ely, who has used the original Hibbs fusion exclusively, re-

fers to his rather frequent failure to establish bony union between two or more of the vertebrae operated upon thus requiring a large percentage of secondary operations. The addition of the osteoperiosteal wafer would materially, if not entirely, eliminate this difficulty.

Whatever the surgical procedure used, recumbency should follow it for a period of two or more months after which a brace should be substituted as long as necessary. These cases should be kept under observation and protection until there is adequate assurance that the disease has been cured.

Hibbs traced his cases for 7 to 15 years and found the percentage of cures 74.6%, while the mortality was 25%, the immediate operative mortality in 286 cases being .9%. Albee reported 90% good results following operation, and Henderson 69.3%. It is generally accepted as a fact that under the most favorable treatment the mortality in this disease is about 25%. This is due in a great measure to unnecessary and inexcusable delay in the diagnosis of the disease and early institution of treatment. If practitioners would abandon the requisite of a hunchback before making a diagnosis of tuberculosis of the spine and would study their cases of pain in the back more carefully, a correct diagnosis would be established early in a much larger percentage of cases and more rapid cure accomplished.

CONCLUSIONS

In our study of the cases of tuberculosis of the spine at the Milwaukee County Hospital we have been impressed with the extremely poor general physical condition of our patients, the high incidence of complicating diseases such as tuberculosis of the lungs, abscesses, draining sinuses, tuberculosis of other bones, paraplegia, etc. Only three cases out of a series of 35 failed to reveal some important complication which seriously impaired the patient's chances of recovery. The lesson pointed out by our studies is that an urgent need for earlier diagnosis of Pott's disease does exist. The lesson is not one to orthopedists whose plea for years has been an earlier diagnosis of tuberculous spines, but it is a lesson to the man who first sees the patient and treats him symptomatically until such time as the seriousness of the disease is self-evident. When this disease is diagnosed earlier the results will be better and the cure more certainly and quickly accomplished.

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APPLICATION REQUIRED

Physicians throughout Wisconsin were circularized late in August by Mr. Harry Nelson, State Compensation Officer of the Works Progress Administration. Plans for giving medical attention to injured employees of the program were explained and those physicians desiring to render service to such injured employees were asked to signify their desire by signing and returning the informative letter.

Any physician who failed to receive this letter may obtain a copy by addressing Mr. Harry A. Nelson, State Compensation Officer, Works Progress Administration, Madison. Physicians were urged to return their letters promptly.

Cancer of the Breast*

By ARTHUR W. ERSKINE, M. D.
Cedar Rapids, Iowa

IN THE last twenty years the treatment of cancer of the breast, both by surgery and by radiation, has been fairly well standardized. Many reliable statistics have been accumulated, and it is perhaps advisable now to make a general survey of the situation, and to try to analyze the reasons for our failures as well as our successes.

The radical surgical treatment of breast malignancies has been developed to a degree undreamed of in the days of Billroth. As a rule, it includes amputation of the affected breast and an extensive dissection of the axilla in an attempt to remove every bit of glandular tissue that may, or may not, be involved. Skillful surgical treatment cures between sixty and seventy per cent of the patients whose tumors are confined to the breast, and between ten and twenty per cent of the patients with axillary metastases. In skillful hands, radical amputation of the breast is not a crippling operation when it is successful. However, when operation fails to remove all cancerous tissue from the axilla, suffering from edema, neuritis and loss of function is likely to be increased.

Treatment by roentgen rays has also reached a high degree of perfection. It consists in an attempt to deliver to the anterior chest wall, and all parts of the axilla and supra-clavicular space, enough radiation at least to inhibit the growth of cancer cells, about the same dose as that required to destroy the average epithelioma. Its even distribution throughout the parts without too much injury to the lungs and pleura is a technical problem, which need not be considered here, but which can be solved easily enough by following any of several standard technics. Postoperative x-ray treatment, given with skill and courage, increases the number of five-year cures about ten per cent when only the breast is involved, and about twenty-five per cent when axillary metastases are present. X-ray treatment is *not* a substitute for operation as a curative procedure. Treatment by radiation alone should only be advised for hopeless cases, for the aged, and possibly for carcinoma en cuirasse. Whenever a permanent cure seems at all possible, treatment by radiation should be considered an adjunct to surgery.

In spite of the great amount of work that has been done, and the progress made in surgery and radiology, the management of cancer of the breast has been disappointing. Probably ten per cent of the lesions are of so high a degree of malignancy, or occur so early in life, that they are hopeless from the start. Perhaps in another ten per cent, the tumor is not noticed until metastases are already present. The remaining seventy-five or eighty per cent could and should be cured by proper surgical and radiological treatment. Our results fall far short of reaching such an ideal. Whether we like it or not, we must admit that the number of our cures depends much more upon the stage of the disease at which the patients submit to operation and x-ray treatment, and upon their ages, than it does upon our skill. Deaths continue to exceed recoveries in this disease in spite of the facts that every woman who can read knows that any lump in the breast may be cancer, that because of its location, almost every breast tumor is discovered in the primary stage, and that every physician is aware of the efficiency of early operation as compared to late. The principal reason for the present disgraceful mortality rate in cancer of the breast is delay. We, as physicians, might now be more usefully employed in devising methods of avoiding or reducing this dangerous delay than in perfecting the technical details of our own art. To that end, I respectfully offer three suggestions.

SUGGESTED PROCEDURE

I suggest, first, that we make it easier for our patients with early cancer by content-

* Presented before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, Sept. 1934.

ing ourselves with a simple amputation without insisting upon a block dissection of the axilla. These women fear the radical operation, and many of them believe that it may spread the disease, or may cripple them. It is not easy to persuade them, before a positive diagnosis can be made, to submit to a procedure as extensive and mutilating as the average block dissection of the axilla. On the other hand, almost any woman is willing to sacrifice a breast if she knows that she will be out of the hospital in less than a week, that she will have no impairment of function of her arm and shoulder, and that her chances for recovery are at least four times what they will be if she waits until a definite diagnosis can be made clinically. But you may say that some of these patients already have invasion of the axilla, and could be saved by a more radical procedure. It is true that among a hundred cases of cancer apparently confined to the breast, fourteen or fifteen will be found to have cancerous axillary glands on microscopic examination, and it is conceivable that three or four additional lives might be saved if radical operation could have been performed on all these patients. But experience tells us that such a thing is impossible because many operations will be refused or postponed. In other words, more lives will be saved by doing simple amputations on a hundred patients than by performing radical operations on ninety of them.

Second, I suggest that we adopt a more pessimistic attitude with the patients who already have metastases. Why should not these patients, or their families at least, be told plainly that by their delay they have lost their best chance for a permanent cure, and that the great majority of them can hope for palliation only? When we know how few of these patients can be cured by what is called, with cruel if unconscious humor, the "complete" operation, what reason can there possibly be for classifying metastatic cancer of the breast any differently than metastatic cancer in any other part of the body? In individual cases, I suppose we should make every effort to obtain an occasional cure, but in the long run, I am convinced that the aggregate number of years of comfortable life of these patients would be greater if they were considered hopeless, a simple amputation performed, and x-ray treatment used in an effort to retard the axillary, supraclavicular and mediastinal extensions.

Finally, I suggest that we abandon the idea that it is possible to make a differential diagnosis between early cancer and benign tumor of the breast. The thing is impossible, as even the experts who waste their time going about trying to teach it to their colleagues have learned to their own chagrin and the sorrow of their patients. *The discovery of a lump in the breast is a positive indication for immediate operation.* When the truth of this dictum is universally established in the minds of physicians and laymen as firmly as the fact that a diagnosis of appendicitis means an operation is established now; then, and not until then, will deaths from cancer of the breast begin to become almost as rare as deaths from cancer of the lip.

Tumors of the Mammary Gland*

By THOMAS J. SNODGRASS, M. D.
Pember-Nuzum Clinic, Janesville

ONE can not discuss the subject of mammary tumors without spending most of his time on the problem of carcinoma. Because malignant disease of the breast, as elsewhere in the body, is painless, and overlooked, or considered of no consequence by the patient for a long period of time, the number of patients seeking surgical aid at a time when cure is possible is only a little over thirty-five out of a hundred. The average duration of the disease, previous to diagnosis, in the cases operated at Mayo Clinic from 1910 to 1930 was 17.4 months. These sta-

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tistics are especially discouraging because this period has not shortened appreciably in the last few years in spite of various educational programs.

In 1913 Doctor Rodman visited the Murphy Clinic and was asked to speak on the subject of carcinoma of the breast. In his introduction, Doctor Murphy said he would like to be able to share Doctor Rodman's optimism concerning the final results in the treatment of carcinoma of the breast.

Doctor Rodman divided breast cancer into three stages—early with a local tumor, but no secondary ones, nor metastases; others fairly so, or presenting a moderate infection of the nearest lymph nodes; others still very advanced with extreme metastases to the lymph glands or elsewhere. The first group, he said, if considered alone, at least 80% could be cured; of the second only 25%; and of the third, none; of the three groups, an average of 50% cures.

Statistics from different clinics will vary, but the most recent report from the Mayo Clinic series shows 26% five-year cure with involvement of the lymph nodes; 71% five-year cure without lymph node involvement; and average five-year cure of 42%, which must be a source of further discouragement if the old statistics are accurate even to a moderate degree.

Generally speaking the benign tumors are more painful, and, therefore, much more alarming to the patient. Aid is sought early and often a patient insists on a breast amputation even when the harmless nature of the disease is quite obvious.

There are no adequate clinical symptoms of carcinoma for making an early diagnosis, and delay or observation over a period of time sufficient for definite symptoms to appear, greatly reduces the percentage of cure by radical surgery. Fixation of the skin over the lesion is probably the most characteristic sign of malignant disease. This symptom was noted by Doctor Harrington in 82% of the cases he reviewed, but he further pointed out that 72% of this group already had metastases to the regional lymph nodes which shows that in three out of four of the cases where the most characteristic symptoms appear, the disease is no longer local, and metastases have already occurred.

The only chance for improvement in the handling of carcinoma, with our limited knowledge of the nature of the disease is, first, a familiarity with the different types of tumors affecting the breast, so intelligent advice can be given the patient when she seeks our aid; and second, a thorough examination of the breasts as well as the cervix in all our women patients, regardless of their complaints. During the period, of so-called cancer age, they should be encouraged to have a routine examination annually or semi-annually if they are to be assured of the benefit of an early operation in case the disease appears.

In order to review rather hurriedly the types of tumors to be found in the breast I have prepared a table—the data being taken from Doctor Babcock's very excellent textbook of surgery. With very few exceptions it is noted that the treatment in each case is excision of the tumor or removal of the breast.

The most favorable case from a surgical standpoint is one in which a clinical diagnosis is impossible. To make a diagnosis, then, one must resort to biopsy. The manner in which this is done is of greatest importance. The tumor should be widely excised with the minimum amount of trauma; a frozen section and a histological examination should be made before the operation proceeds further. If the tumor is malignant a thorough radical operation should be performed at once. It has been shown very definitely that the most hopeless cases of carcinoma are those in which an incomplete operation has been performed primarily. Unless there are ample facilities for an immediate histological examination of the tissues and a thorough operation at the time of examination, one should not attempt to treat a questionable breast tumor.

One of the older teachers of surgery has a very novel way of impressing his students and visiting doctors with the importance of accurate diagnosis in the treatment of tumors of the breast. He presents a patient with a breast tumor; shows how the examination should be conducted—the doctor stand-

A DISCUSSION OF TUMORS OF THE MAMMARY GLAND

Type	Age	Involvement	Character	Prognosis	Pathology	Treatment
Chronic mastitis (involution mastitis)	Menopause or following pregnancy	Entire breast or lobe	Enlarged, firm, and tender	Disease persists for years	Secreting structure replaced by fibro-connective tissue and fat	Support, iodides, thyroid or ovarian extract
Chronic diffuse lobular (interstitial) mastitis	Menopause or following pregnancy	Entire breast	Breast smaller, irregular, lumpy or cystic; cysts are round.	Progressively more cysts.	Contracting connective tissue makes pressure on ducts. If many cysts form it is termed Schimmelbusch's disease.	If only a few cysts, aspiration; if many ablation of breast.
Tuberculosis of breast (6% of benign lesions)	20 to 50	Right breast, upper and outer quadrant.	Swollen with discrete or confluent nodules, later breaking down forming sinuses.	Favorable if limited to skin and mammary gland.	Histologic and microscopic examination indefinite. Guinea pig inoculation more reliable.	Medication with heliotherapy and radiotherapy, or mastectomy.
Dermatitis papilloma malignans (Paget's disease of the nipple) associated 1% carcinoma breast.	35 to 60	Sharply outlined superficial ulceration around nipple.	Carcinoma underlying breast early.	Resistant anti-eczematous medication.	Malignant.	Early amputation.
Retention and exudation cysts (cysts of larger ducts)	25 to 45	Under areola, difficult to palpate.	Painless, discharge serous, mucous, turbid, or bloody fluid.	Papillary intraductal growths 15% or more carcinoma intervenes.	Cystic and papillary growths. Periductal fibrosis also occupy the central area of breast.	Extirpation.
Simple cysts (serous cysts)	All ages	Central area.	Thin-walled, may contain as much as 500 cc fluid.	Enlarge.	Thin-walled cysts.	Excision.
Galactocele	Pregnancy and lactation	Any portion	Retention cysts			Excision
Involution cysts, blue dome cysts, Schimmelbusch's disease, Reclus' disease, Brodie's disease, chronic cystic mastitis, cystadenoma	30 to 60	Toward the periphery	Multiple, vary from size of a pinhead to that of an egg.	No evidence that this is a precancerous lesion; recurrent and progressive	Cysts	Excision aspiration or mastectomy.
Parasitis cysts (rare)						
Adenoma: 1. Pure acinous adenoma 2. Fibro-adenoma 3. Intracanalicular fibro-adenoma 4. Cystic adenoma	20 to 30	Any portion of breast.	Painless, hard rounded, freely movable lump in mammary substance	Certain types may become malignant	White, smooth homogenous, lobulated fibrous mass	Should always be excised.
Fibromyoma (occasionally)						
Sarcoma—10% of the tumors of the mammary gland	Any age without relation to lactation or pregnancy		Round or oval, elastic or semi-fluctuating, usually encapsulated, rapidly growing, painless.	Rapid secondary involvement of lungs, liver, brain, etc.	Round cell and spindle cell type.	Radical amputation and radiation.
Carcinoma—80% true tumors of breast	40-60, average 50; rare before puberty, unusual before 35	Over 50% upper outer quadrant. Early axillary involvement	Slowly or rapidly growing, small irregular, hard nodule embedded in mammary tissue	80% cure if radical operation in 1st stage, 20% cure if axillary involvement; no cures if advanced.	Spheroidal-celled most common, growing from acini of gland; columnar-celled or duct carcinoma; squamous-celled or epithelioma, growing from the nipple.	Complete operation.
Sweat gland carcinoma	19-81, average 51.	Central area, axillary tail, submammary fold	3 to 6 cm. in diameter, superficial, early skin adhesions.	Early axillary involvement and metastases	Develop from sweat glands of breast.	Complete radical operation.

ing behind the patient, palpating with the flat of the hand against the chest wall, raising the patient's arm above the head on the affected side to demonstrate flattening or dimpling of the skin over the tumor, or deviation of the nipple toward the tumor; careful examination of the axillary and supraclavicular lymph nodes to determine the presence or absence of metastasis. After this careful examination he concludes that this is a simple benign lesion and enters into a very excellent discussion of the differential diagnosis of benign and malignant tumors of the breast, as he prepares to excise this mass.

After a rather wide excision of the tumor, he turns it over to the pathologist for examination and waits for the diagnosis before proceeding with the closure; and to the surgeon's great chagrin and embarrassment, the pathologist comes back with a diagnosis of carcinoma. He proceeds with his very radical operation for carcinoma leaving the impression upon all those who have witnessed this demonstration that when a man of his experience and ability can be so far wrong in his diagnosis, it is impossible for one of only limited experience to say what tumor may be malignant or benign by simple physical examination.

There are some mechanical aids in determining the type of tumor, such as the use of transillumination to show whether the mass is cystic or solid. An x-ray technique showing shadows of the breasts has been used, but is not recommended by impartial critics, and infra-red photography is too new to know much about. The use of a needle to aspirate the contents of a cyst, or even a minute piece of tissue for examination from a solid tumor is possible, but not generally used.

The important thing to note is that carcinoma is curable, that a large percent of patients will be permanently relieved if operated early; that even in the more advanced cases, many years can be added to their lives, and even in this group a fair percentage can be cured.

If we are to accept statistics, such as are given to us by some of the clinics as representative of what can be done for the patient with carcinoma, we must accept their methods and operative procedures as the only means of duplicating the results. We must learn that an early accurate diagnosis is imperative, and that an inadequate operation is worse than no operation at all.

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Thyroid Diseases in Children*

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I WISH to discuss childhood thyroid disease only wherein it differs from that seen in adults. The administration of iodin in the schools and the use of iodized table salt has definitely altered the thyroid problem in recent years, but in the number of patients only. Those patients coming for treatment present thyroid disease problems which have arisen as a result of or persisted in spite of iodin administration.

In 1930, a Michigan salt distributor stated that the public bought eight cases of iodized table salt to one of plain salt. In 1924, no iodized salt was sold[1].

Our past experience teaches us that cretins are rarely seen; however, Stoddard[2] in a survey including institutions in and about Milwaukee has collected 68 cases and raises the question: "Will cretinism become endemic in Wisconsin?" He seems to think it will. Cretinism occurs in distinctly goitrous families. The colloid-containing nodules found in many cretins, as a rule, react to the administration of iodin the same as in cases of recurring adenoma and starts them to hyperfunction[3].

Once started, the process may continue for years without further administration of iodin. Cretins are usually treated by administration of thyroxin or desiccated thyroid extract. We should not omit the effort to stimulate with iodin any small adenoma which might be present. Iodin when administered to mothers will prevent cretinism in the offspring.

The most common thyroid condition in children is simple goiter or colloid goiter

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with or without adenoma, usually seen at or shortly before puberty. Diffuse colloid or simple goiter has a higher incidence in infancy and childhood, attains greater size and regresses later in life and less completely in those geographic areas in which it is more prevelant:[4] that includes Wisconsin. Some writers believe that the majority of adenomatous goiters have their beginning in simple colloid goiter, and Plummer insists that practically all colloid goiters contain adenomas.

In the majority of cases of simple thyroid with lateral lobes 6 cm. or more in diameter when pressed between the thumb and forefinger, the basal metabolism ranges from 8 to 18% below the average normal. Bruit and thrills are as a rule present; also pulsation of the superior thyroid artery may be felt. Bruit and a low basal metabolism may be present early in the course of mild cases. The facies including coloration, dry skin, lack of energy, and other indications of hypothyroidism are noted in many of the most pronounced cases. The facts presented indicate that mild or potential hypothyroidism is present in all cases during the progressive period[4].

Iodin has long been the sheet anchor in the treatment of colloid goiter. Although the results of treatment are sometimes unsatisfactory, it may be considered a law that an increased supply of iodin to the thyroid favors the absorption of an excess of colloid. Marine has demonstrated that the administration of iodin will prevent the development of colloid goiter.

If the patient having colloid goiter with bruit, thrills, and palpable thyroid arteries is given five to ten mgm. of thyroxin intravenously, the bruit will diminish in form three to six hours and the bruit, thrills, and palpability of the arteries will disappear in from 24 to 36 hours. This reaction takes place in all cases. During the first 24 hours, the thyroid shrinks rapidly in size, and if very vascular, may shrink one-third in volume. Following this, the colloid is, as a rule, rapidly absorbed. Some of the largest goiters of this type shrink to barely palpable size within eight to twelve weeks. During this period sufficient thyroxin to maintain a basal metabolism at the average normal or slightly above is given. With the reduction of blood volume within the first 24 hours, multiple adenoma may become readily detected in tissue that has previously palpated like a symmetrical diffuse colloid goiter. If the administration of thyroxin is not followed up, the vascular phenomena will return in from two to three weeks and the vesicles again become distended with colloid. As a rule, a large proportion of the thyroxin or any thyroxin-containing preparation administered by mouth to patients with diffuse colloid goiter is not absorbed from the gastro-intestinal tract, or, at least, does not reach the blood as an active agent. The contrary is true in thyroidless myxedematous persons. A small amount of the above mentioned drug will maintain the metabolism at normal[5]. The fact that the administration of iodin prevents the development of endemic goiter of man and animal in correlation with the observation of McCarrison on the infectious nature of goiter, suggests that the bacterial flora in some way robs the organism of the small amount of iodin contained in food that would otherwise be available to the thyroid for the formation of thyroxin[6].

From the above mentioned facts we may conclude that pregnant mothers should be given iodin to prevent the occurrence of cretinism. Secondly, that iodin should be given to children early, certainly not later than the sixth year to prevent the formation of adenomatous goiter inasmuch as all adenoma seem to have their inception or beginning in diffuse colloid goiters. Thirdly, that in treating a case of diffuse colloid goiter, the treatment should consist first of intravenous injections of thyroxin which is to be maintained during the period of retrogression of the gland with careful observation as to the presence of adenoma. Small doses of iodin may then be given following the complete retrogression of the gland. Fourthly, all sources of infection must be eradicated as these seem to deprive the thyroid of available iodin.

DIFFERENTIAL DIAGNOSIS

True exophthalmic goiter is rare in children below the age of twelve. There exists,

however, a group which clinically simulates this disorder and which is called hyperthyroidism and abortive type of Graves' disease. Patients of this type are often cited as patients of exophthalmic goiter that respond to medical treatment. These children, mostly girls between the ages of eight and fifteen, are nervous, emotionally unstable, complain of headaches and cardiac palpitation on exertion. They are above the normal height for their age, have slightly enlarged soft thyroids, rapid heart rates, slight staring expression of the eyes, and their hands are constantly moist. These patients may be referred to as the functional group. From a therapeutic standpoint, we must definitely determine whether it is producing a toxic constitutional state. Correct diagnosis is of paramount importance as statistics show that the peak of incidence of exophthalmic goiter of children also occurs at puberty. The symptoms of exophthalmic goiter in children do not differ materially from those seen in adults. For diagnostic consideration they may be grouped under the following seven headings:

1. Peristent tachycardia with elevated blood pressure and pulse pressure.
2. Nervousness and tremor.
3. Enlargement of the thyroid with a local bruit.
4. Exophthalmos.
5. Loss of weight and strength in the presence of an excellent appetite.
6. Increased basal metabolic rate.
7. Absence of constipation.

All of these symptoms with the exception of exophthalmos can occur in other diseases: chorea, tuberculosis, rheumatic heart disease and functional disturbances. Let us consider these symptoms separately. The pulse rate in children is usually extremely rapid, in fact there is considerable doubt if one is justified in making a diagnosis of exophthalmic goiter in a child when without treatment the pulse rate is under 100 per minute. It will more likely be above 130 and remain persistently rapid day in and day out. The systolic pressure is usually elevated and even in children it is rare to find the systolic pressure below 120. The pulse pressure which is roughly proportional to volume output of the heart per beat is increased. This accounts for the forceful pounding of the heart and violent pulsation of the carotid vessels. Systolic murmurs are often encountered. In an analysis by Seed and Poncher of two groups of cases of 16 cases each, the average exophthalmic showed a pulse rate of 134 per minute and a blood pressure of 135 systolic over 62 diastolic; while the functional group showed an average pulse rate of 116 per minute and blood pressure of 113/50. From these facts we feel justified in making the assertion that a child with a systolic blood pressure under 120 or a pulse rate under 120 is not likely to have an exophthalmic goiter. In the exophthalmic type, nervousness is very pronounced and characteristically has a rather sudden onset. The functional group will show a history of nervous manifestation over a period of years. The nervousness is exaggerated in great degree, so much so, as to make a diagnosis of chorea worth considering. Tremor has no great differential diagnostic significance. The thyroid is enlarged and palpable in at least 90% of cases, and one should hesitate in making a diagnosis of Graves' disease in the absence of a definite enlargement of the gland. The gland is distinctly firm, as contrasted to the soft enlargement of the functional group. A bruit over the superior poles, providing one is sure that it is not a carotid bruit or a venous hum, is helpful. It is present in 70% of the cases. We must not place too much significance on this, however, as a bruit is frequently heard in simple colloid goiter.

Under Lugol's solution, the gland becomes firmer and sometimes enlarged, and the general improvement must occur within a week to ten days. Under continued observation, the patient with exophthalmic goiter gives definite evidence of the diagnosis, while the child of the functional group runs more or less of an uneven clinical course until puberty is established.

It is sometimes difficult to be sure that exophthalmos actually exists. The various eye signs are of little value in questionable cases. The stare usually precedes the protrusion, and there is but one constant characteristic of the stare, that is the elevation and retrac-

tion of the upper lid. Normally, the upper lid lies below the level of the iris. When a definite stare is present, the lid is retracted so that the white sclera shows between it and the iris. This is not found in the functional group.

Loss of weight and strength, associated with a normal or increased appetite is the usual finding. The loss of strength, however, may also be present in the exophthalmic group.

Curiously enough digestive symptoms are unusual and the gastro-intestinal crises consisting of anorexia, vomiting, and diarrhea seen in the adult patients seem to be very rare. In the functional group, anorexia and perverted appetite are common.

In exophthalmic goiter, the metabolic rate is usually above 30, while in the functional group it is rarely found as high as 30. We must take into consideration the fact that in young girls at puberty there is normally a physiologic increase in the metabolic rate which gradually diminishes as menstruation is established[7].

As an aid to a true determination of the metabolic rate and in those cases where it is difficult to take the metabolic rate, we may use a simple laboratory procedure, mainly that of determination of the blood colesterol which in children is normally about 190. In exophthalmic goiter, this will be greatly decreased, while in myxedema and cretinism it is greatly increased[8].

TREATMENT

In treating these patients we must realize that young children are apt to need their entire thyroid for future growth and development, and the treatment should lead toward conservatism. Elimination at the proper time of discoverable infectious foci, an ample low animal protein dietary, a proper rest routine, and a few carefully selected medicaments with psychotherapy dominating the patient and household, should effect recovery in the average child within several months[9]. Surgical treatment is indicated in severe cases.

According to Thompson, the form in which iodin is administered in exophthalmic goiter does not matter as the effective dose is much smaller than that ordinarily employed[10].

The present vogue of giving iodin to pregnant women, of administering iodin in the public schools, of the use of iodized table salt, should continue to gradually decrease the incidence of thyroid disease in this region, largely through the influence of the production of generations of individuals (women) with normally functioning thyroid glands.

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Malignant Neutropenia; Case Report

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A GRANULOCYTOSIS (malignant neutropenia) has been noted following the taking of numerous chemotherapeutic substances. It must be remembered that the same condition may be the result of an atypical reaction of the hematopoietic system to sepsis.

REPORT OF CASE

The patient, a 48-year-old white male, was well until four days before his admission to the hospital.

The illness began with a sore throat, and a "grippy" feeling, without an elevation of temperature. Because he was in the habit of taking aspirin and pyramidon for colds, he repeated this remedy for his present complaint. In the 48 hours prior to admission, he took 50 grains of pyramidon.

His condition was serious at the time of hospital entrance. The temperature was 101, the pulse 120, and the respirations 25. There was a reddening of the gum margins, and a patch of erysipeloid dermatitis involving the chin and neck. The glands were not enlarged nor was the spleen palpable. The blood pressure was 130/80. Physical examination of the chest showed nothing abnormal.

The first white count on the day of admission was 200. Eight more counts showed a variation from 150 to 300 lymphocytes per c.mm. of blood. No. granulocytes were seen. The red blood cells numbered 3,120,00 per c.mm. The hemoglobin was 12 gms., and the non-protein-nitrogen was 53 mgm. per 100 cc. of blood. The icteric index was 16 but no jaundice was noted.

During the first day he was given 500 cc. of citrated blood, 4 ampules of pentnucleotide, 3 cc. of intramuscular liver extract and continuous glucose venoclysis.

The following morning his white count rose to 2,000 but still no granulocytes were seen. His temperature rose steadily to 105, pulse to 150, respirations to 30. He became rapidly weaker and died 48 hours after admission.

Postmortem examination was done by me 15 minutes after death of the patient. No rigor, hypostasis, or jaundice was noted. A slight degree of cyanosis was evident in the lips and fingernail beds. The tissues of the anterior cervical region were edematous and indurated. There was no free pus or hemorrhage. The thyroid, thymus, and lymph nodes of the neck showed no abnormality. Microscopical section of subcutaneous tissue from the upper anterior cervical area showed an infiltration of inflammatory cells of all types.

The pleural cavities showed recent stringy, fibrinous adhesions in all portions except for a space between the visceral and parietal pleurae in the right apical region where there was a hemorrhage of 100 cc. of recently clotted blood. The pericardium contained recent thin, stringy, fibrinous adhesions which were easily broken with the fingers. There was no free fluid within the pericardial sac.

The heart weighed 350 gms. Its muscle fibers were soft, pale and flabby. Microscopical examination showed no inflammation of the myocardium. The valves and endocardium were without change. The root of the aorta showed a few yellow atherosclerotic plaques but no evidence of calcification.

The lungs were both edematous. The left lower lobe was dark purple in color and entirely consolidated. Cut section showed a great increase in bloody fluid content. No free pus could be expressed. The right lower lobe showed nodular areas of consolidation. No free pus could be expressed from this region. The mucous membrane of the trachea and bronchi was injected and covered with a blood-tinged exudate. The peribronchial glands were not enlarged.

The spleen weighed 200 gms. The capsule was not thickened. On cut section the pulp was dark purple; the follicular markings were not prominent. It did not appear to be a septic spleen. Microscopically it showed a great increase of red blood cell content throughout. The smaller arteriolar walls appeared in some areas to be replaced by hyaline tissue. There was a moderate amount of iron deposit present. The splenic follicles were irregular in outline. Normoblasts and early red cells could be distinguished but there were no megaloblasts nor granulocytes seen.

The liver weighed 1450 gms. The capsule was slightly thickened in and about the gallbladder region. Cut section showed the hepatic markings to be distinct although the general appearance was pale. There was no evidence of hematopoiesis microscopically. The gallbladder contained 200 cc. of dark green bile which could be easily expressed into the duodenum. No stones were found and the wall of the gallbladder was not greatly thickened.

The stomach, small and large bowels showed no pathological changes. The pancreas was of normal size and structure, as were the adrenals.

The kidneys each weighed 175 gms. The capsules stripped with ease leaving a smooth surface. On cut section the markings were distinct. The cortical and medullary portions were not thickened nor were the pelvices dilated or inflamed. The ureters were not dilated. The bladder contained a small amount of clear urine. The prostate was not large. The lower abdominal aorta showed a few yellow streaks throughout, most prominent in the region of the bifurcation.

The head was not examined.

Grossly the marrow of the femur (mid-region) and the sternum was dark red in color. Microscopically, all types of early red cells were seen in the marrow but there were no metamyelocytes or eosinophils as are commonly seen in the normal bone marrow.

Culture of the heart's blood showed no growth of organisms.

The postmortem diagnoses were:

Malignant neutropenia; cervical cellulitis; acute pleuritis; acute pericarditis, and pneumonia with lobar type of consolidation.

This case is one of malignant neutropenia in which the history of amidopyrine (pyramidon)[1] ingestion was present. Lobar pneumonia, as well as a diffuse infammatory reaction involving tissues of the neck and thorax, was found at autopsy.

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Radiation Therapy in Medical Practice

IV. Leukemia, Hodgkin's Granuloma and Allied Diseases*

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ROENTGENTHERAPY of leukemia is based on the high radiosensitivity of lymphoid elements. While the susceptibility of these cells has been known since the early experiments of Warthin,[15] it is interesting to note that doses as low as 15 r produce definite histological changes in the spleen of rats. The enormous regenerative power of this organ is demonstrated by the fact that even after the administration of 2000 r complete recovery takes place**. For all practical purposes the effects of x-rays and radium on the lymphoid elements are identical, provided, of course, that equal doses are applied at essentially the same rate (time factor). From the standpoint of economy as well as simplicity of technic, roentgentherapy should be given preference.

When considering the treatment of leukemia it is necessary to differentiate between the acute and chronic types. In my opinion patients with acute leukemia should not be subjected to irradiation; in a few cases where I tried yielding to pressure from anxious relatives, it almost seemed as if the fatal outcome had been hastened. In the chronic form, however, a good deal can be accomplished by proper treatment given at the proper time. Most statistics[11], [12] seem to show that while there is only slight prolongation of life in the majority of cases the so-called useful period of the patient is considerably lengthened as compared with untreated cases.

TREATMENT METHODS

In both myelogenous and lymphatic leukemia two methods of irradiation can be used: the local and the general body exposure. In myelogenous leukemia we usually irradiate the spleen or the long bones or both; in lymphatic leukemia the involved glands, but the spleen only if it is greatly enlarged or painful. In a series of cases analyzed by Hoffman and Craver[5] there was no significant difference in the duration of life in patients with myelogenous leukemia whether radiation was directed to the spleen and long bones or to the spleen alone. They gained the impression, however, that those who received only irradiation over the spleen did not show as much anemia as those who had irradiation of the long bones and spleen. Leukemic skin lesions are treated by direct exposure, assuming, of course, that they do not extend over too large a part of the body surface. Involvement of the bones which is occasionally seen may successfully be treated by high voltage roentgen rays; according to Craver and Copeland[1] there is often relief from pain as well as complete repair of the diseased bone.

A rare complication of myelogenous leukemia, priapism, is probably due to a thrombosis in the corpora cavernosa. Several cases have been reported which received relief from local exposures over the entire penis (120—150 r) combined with exposures of the spleen[9]. According to some observers the lesion is apparently not central since general anesthesia does not affect it.

During the last 6 years the general body exposure has been used by a relatively small group of radiologists in the treatment of malignant neoplasms including leukemia, Hodgkin's and allied diseases. It was first suggested by Dessauer[3] and later taken up by Teschendorf[14] and others. Heublein[4] started an extensive study of this method in the treatment of malignant disease exposing patients continuously over periods of several days to three weeks at a distance of about 5 meters between patient and tube. Craver and MacComb[2] rendered a report recently on 134 cases treated with this method over a period of 2 years. They came to the con-

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** Experiments by E. A. Pohle and C. H. Bunting, not yet published.

clusion that in radiosensitive diseases, as leukemia, Hodgkin's disease, multiple myeloma and lymphoblastoma, worthwhile results can be obtained but little is to be expected in radioresistant neoplasms. Great caution is necessary of course in the use of the general body exposure because of the high rate of absorption due to the large areas exposed to the roentgen rays.

It is impossible to establish hard and fast rules concerning the best method of treatment. We usually start with local exposures unless the white blood count is over 200,000 and the spleen greatly enlarged in myelogenous leukemia, or widespread involvement of the glands in lymphatic leukemia. Patients who have been treated over a certain period of time and do not respond well to local exposure are also given a trial with general body exposure. This change in technic often brings about symptomatic relief in an apparently hopeless case; a typical example is given in table I*.

This leads us to the question of technic: low, medium or high voltage therapy. I believe that in the early stage moderate potentials (130 kv., .25 mm. Cu.) will produce good results; however, it is necessary to observe each patient carefully and as soon as there is less response during a series of treatments than in the beginning they should be given high voltage therapy (160—200 kv., .5 mm. —1.0 mm. Cu.). A typical example is given in Table II.

The single dose applied in patients with leukemia should be moderate[10] (100—200 r per field for local and 25—50 r for general body exposure), since we are dealing with an extremely radiosensitive tissue where too rapid destruction of cells is apt to lead to severe systemic reactions. It is also noted that massive doses do not bring about a permanent cure and consequently the best policy is to use as small doses as possible but sufficient to keep the patient comfortable.

In the determination of the treatment rhythm the radiologist should be guided by a number of factors; the general condition of the patient tops the list. Next comes the blood count, not only the absolute leucocyte count but also the differential count, particularly the nature and number of immature cells. A relative lymphocyte count of 20 per cent or less should caution the radiologist against further treatment except under conditions demanding immediate action. A moderately low red cell count and hemoglobin do not contraindicate irradiation; as a matter of fact they often improve under treatment. The basal metabolic rate also offers help in judging the effect of roentgentherapy; as long as it remains high additional treatment is usually required. This was established for lympthatic leukemia several years ago by Krantz and Riddle[8]; according to our experience it holds also true in a good

TABLE I

Date	W.B.C.	r	Field	Remarks
5-15-32	48,850	1200	Spleen & Long Bones	5-26 to 6-13-32
7-14-32	13,000	--------		X-ray therapy in Sept., 1932, and May, 1933. Highest count 20,000.
9-19-33	110,000	400	Spleen & Long Bones	
9-27-33	112,500	--------		
10-12-33 to 11-1-33	102,550	100	Ant. & Post. Body	8 sittings of 25 r each.
1-8-34	17,000	--------		
5-14-34	85,000	100	As above	
9-7-34	8,500	--------		

TABLE II

Date	W.B.C.	r	Field	Remarks
2-4-32	234,000	1270	Spleen & Chest	2-4 to 3-7-32 125 kv.; .25 Cu.
3-14-32	57,000	--------		
5-2-32	93,000	300	Chest	
6-17-32	131,000	300	Spleen	
9-1-32	138,000	250	Spleen	
11-25-32	118,000	300	Spleen	
2-17-33	142,000	275	Chest	
5-15-33	284,000	200	Spleen	
6-6-33 to 7-17-33	--------	1050	Spleen & Mediast.	High voltage therapy 180 kv.; .5 Cu.
8-11-33	29,000	--------		

* The white blood count is used to illustrate the reaction of the patient because it is most simple. As discussed later there are, of course, other factors to be considered in arriving at a decision as to the best procedure in a given case.

many patients with myelogenous leukemia. As long as the spleen is enlarged and causes pressure symptoms or pain, treatment must be continued, of course within safe limits and not indefinitely. Two English clinicians, Knott and Watt[7], recommend a phagocytic test which enables them to obtain information regarding the following questions: 1. Is irradiation likely to produce undue reaction, clinically or haematologically? 2. When treatment is once started, how long, and how strongly, may it be continued? 3. What is the prospect of a good response and return to a more normal blood picture? 4. When should irradiation be repeated? To my knowledge this test is not used widely in this country.

In summing up these indications it must be emphasized that we should not strive to reduce the white count to normal figures but continue treatment only to that point where the patient is free from symptoms and can go about his ordinary duties. In many cases this feeling of well-being is quite compatible with a white count of 20,000—40,000.

Supplementary therapy as, for instance, the administration of iron, liver and perhaps arsenic is often helpful; blood transfusions may also be considered, particularly in the later stage or sometimes before instituting roentgentherapy. Small or moderate quantities of blood are advised since severe reactions have been observed in cases where 500 cc. or more were used at one time.

A different approach to the problem of treating leukemia has been offered by several Russian investigators.[6, 13] They found that patients with toxic symptoms showed a high uric acid content in the blood. Irradiation of the kidneys produced striking remissions. They leave the question open whether this was due to a direct effect of roentgen rays on the kidney function or to a reduction of a leukemic infiltration of the parenchyma of the secreting organs.

The rationale of radiation therapy in the aleukemias, Hodgkin's, Mikulicz's and allied diseases is quite similar. The absolute white count must be closely observed in the leukopenic forms of aleukemia, and if it drops below 4000 leucocytes, x-ray therapy is usually contraindicated. In lymphogranulomatosis the treatment may prove life-saving in patients with massive mediastinal involve-

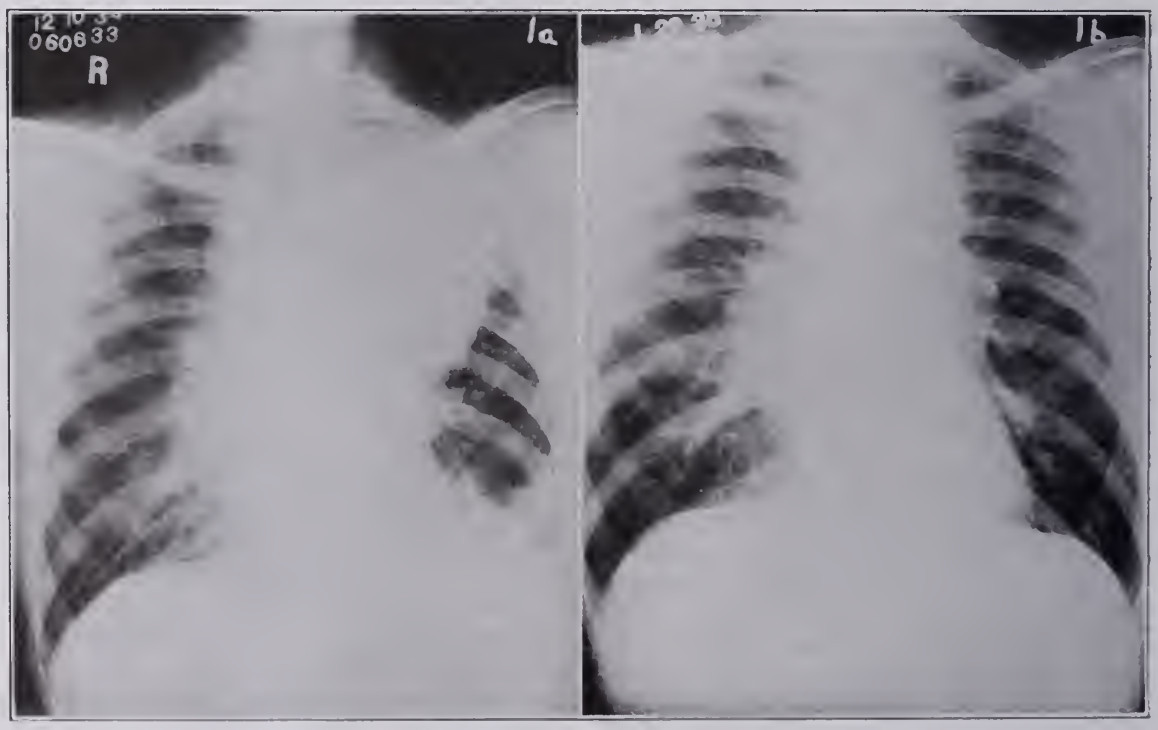

Fig. 1a. Roentgenogram of chest taken on 12–10–34 before treatment.
1b. The same on 1–29–35 after treatment. Note marked reduction in size of growth.

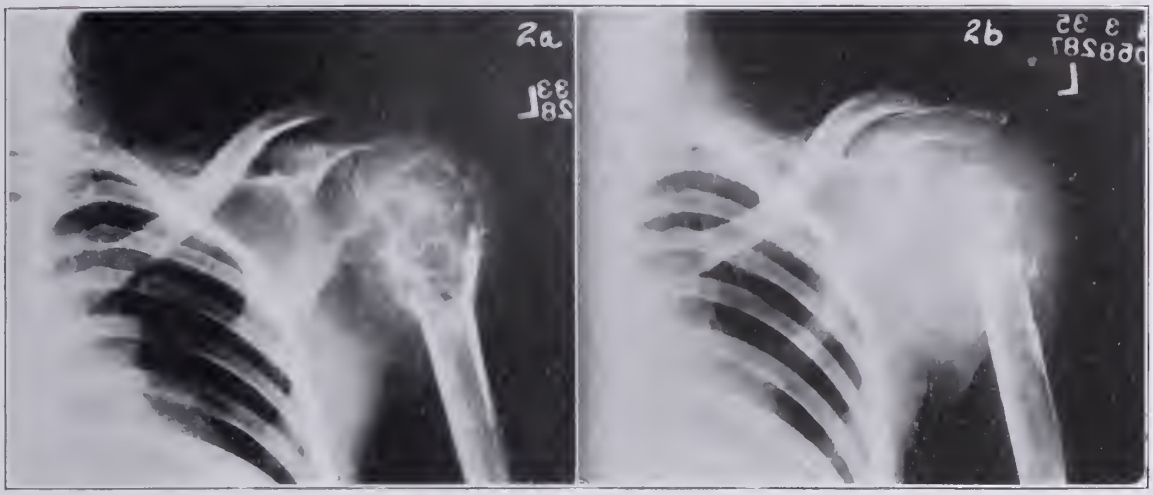

Fig. 2a. Involvement of upper humerus in Hodgkin's disease on 6–12–33 before treatment.
2b. The same on 4–3–35 after treatment. Definite reduction in size of bone lesion.

ment and resulting respiratory embarrassment. Roentgenograms of the chest of one typical case before and after treatment are shown in Fig. 1. In Hodgkin's granuloma a small percentage of cases develop bone involvement, particularly during the late stage of the disease. The site of the lesions is found most frequently in the spine, also in the sternum, the femur and other long bones including ribs and clavicle. Roentgenographically the process presents the picture of a periostitis or that of actual bone destruction. The pain accompanying these lesions may be considerably relieved by roentgen therapy. The roentgenograms of a patient with involvement of the humerus, a rather unsual site of secondary deposit, are shown before and after treatment in Fig. 2.

Mikulicz's disease, characterized by a bilateral swelling of the lacrimal and salivary glands, is likewise amenable to roentgen rays. We have had occasion to observe a

Fig. 3a. Patient with Mikulicz's disease proved by biopsy. Before treatment 1–14–35.
3b. The same after treatment 3–5–35. Glandular enlargement entirely disappeared.

case of this type recently. Fig. 3 shows the patient before and after treatment. There is no doubt that this disease is rather rare and that it is often impossible from a pathological standpoint to differentiate it completely from other diseases belonging to the lymphoblastoma group.

SUMMARY

1. The rationale of radiation therapy in leukemia, Hodgkin"s, Mikulicz's and allied diseases is briefly discussed.

2. Each patient presents a separate problem and must be dealt with individually; no standardization of treatment is possible.

3. The proper handling of cases of this type requires the close cooperation of the internist and the radiologist.

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Are We Satisfied With Our Wisconsin Infant and Maternal Mortality Rates?

By AMY LOUISE HUNTER, M. D.
Bureau of Child Welfare, State Board of Health, Madison

IF FOR a moment we turn to a study of the maternal and the infant mortality rates (Figure I) in Wisconsin since 1908 we are impressed with two things. First, during this period of time, there has been a marked decline in the infant mortality rate. This has come down in the 27-year period slightly over 50%. Secondly, we find that during this same period of time there has been practically no decline in the maternal mortality rate. In fact, from the period 1920 to 1930 the trend was slightly higher than in the previous decade. It is only in the past few years that we have reached levels as low as those reached in 1909 and 1912. However, it must be understood that the causes of death incident to maternity have been much more closely scrutinized in recent years than formerly, hence there is undoubtedly more reduction than the actual records show.

In view of these facts it is worth analyzing the infant and maternal mortality rates by counties for the past three years. This period has been chosen as it is only since 1932 that correction for residence has been made in recording all births and deaths in the state. If records previous to that year should be considered it would give an unfair picture for counties with hospitals which recorded births and deaths of persons from other counties. During this three-year period there were in the state 155,231 live births; 7,642 infant deaths (deaths under one year); 670 maternal deaths. Florence County had the lowest number of live births, 215, and Milwaukee County had the highest, 34,996. The births, deaths, and rates were as follows:

Wisconsin 1932-1934, inclusive	Births	Infant Deaths	Infant Rate	Maternal Deaths	Maternal Rate
Counties with Cities 10,000 or over....	96,389	4,683	48.48	440	4.56
Counties with no Cities over 10,000..	58,842	2,959	50.28	230	3.9
State	155,231	7,642	49.22	670	4.36

It is interesting to note that whereas the death rate for infants was slightly lower in all counties with cities over 10,000 in these same counties the mothers were at a disadvantage as shown by the higher maternal rates for the counties with large cities.

INFANT MORTALITY

In considering the infant mortality the 1934 figure for the state was 49.3 which is

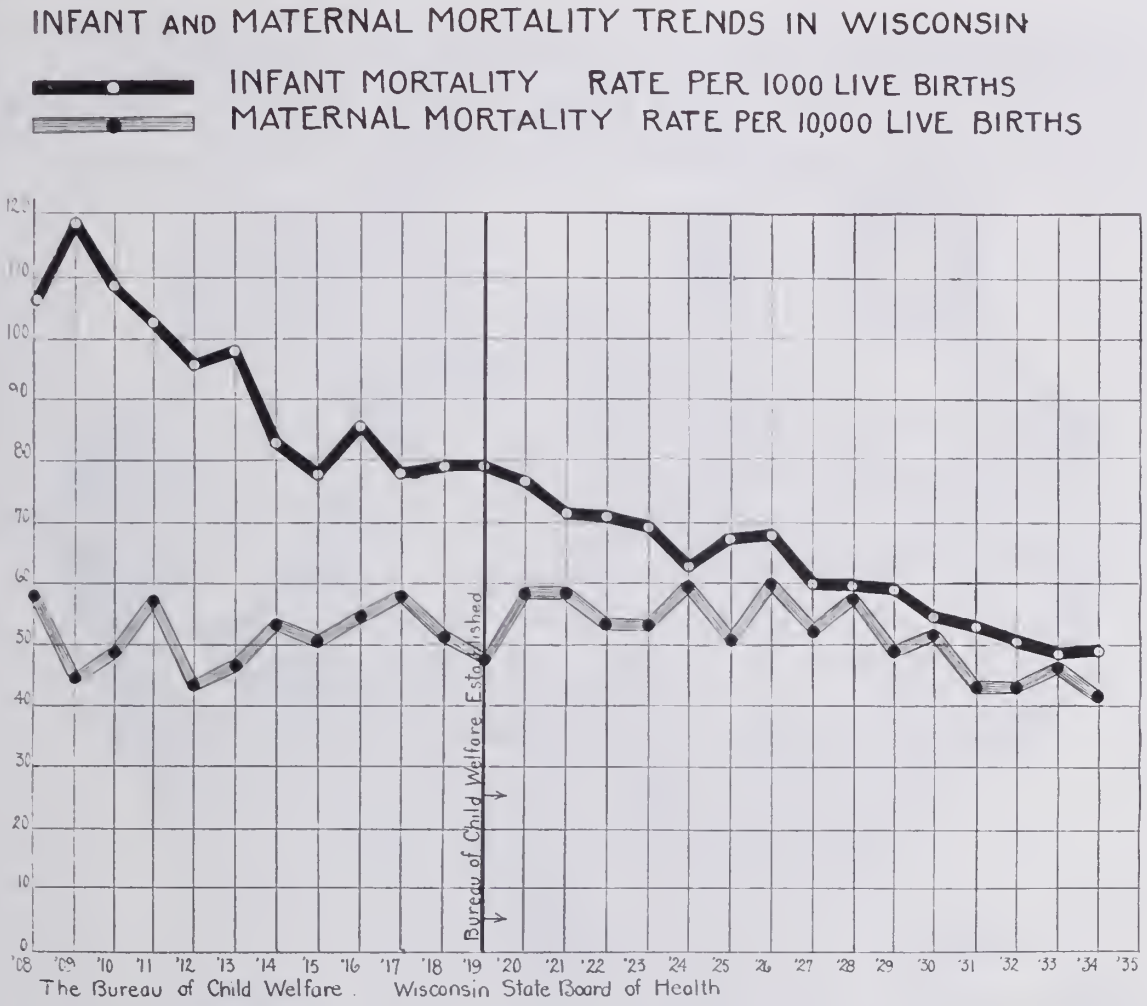
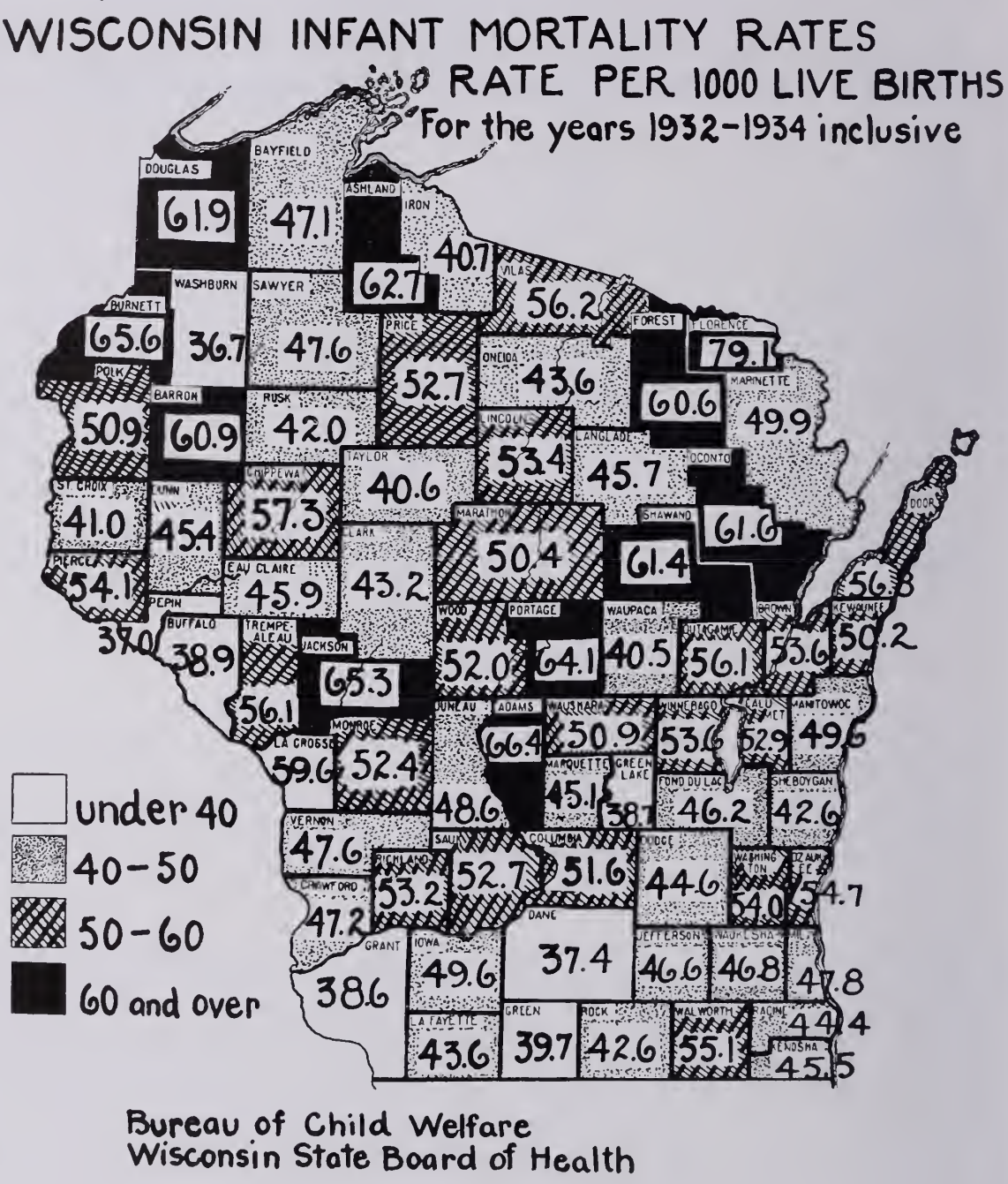


Figure I

practically the same as the rate for the three-year period (49.2). We have at last reached a point where there are less than 50 infant deaths per 1000 live births. This is better than the record of many states in the United States. By studying the rates in the various counties of Wisconsin for the three-year period, 1932–1934 inclusive, (Map I) we find that there is a wide range among the different counties. Washburn leads the way with a low rate of 36.7 infant deaths for every 1000 live births, followed closely by Pepin with 37.0 and Dane with a rate of 37.4. The figures of these and many other counties show that it is possible to approach a rate far below the present rate for the state. Less encouraging are the rates at the upper end of the scale; 79.1 for Florence; 66.4 for Adams; 65.6 for Burnett; and 65.3 for Jackson County. However, what some counties have done others can do, and it should not be impossible for every county to reach a rate as low as 35 infant deaths per 1000 live births. If every county in Wisconsin will bring its rate down to this low level, we can advance to a leading place in the United States with a low infant mortality rate. (See Map I).

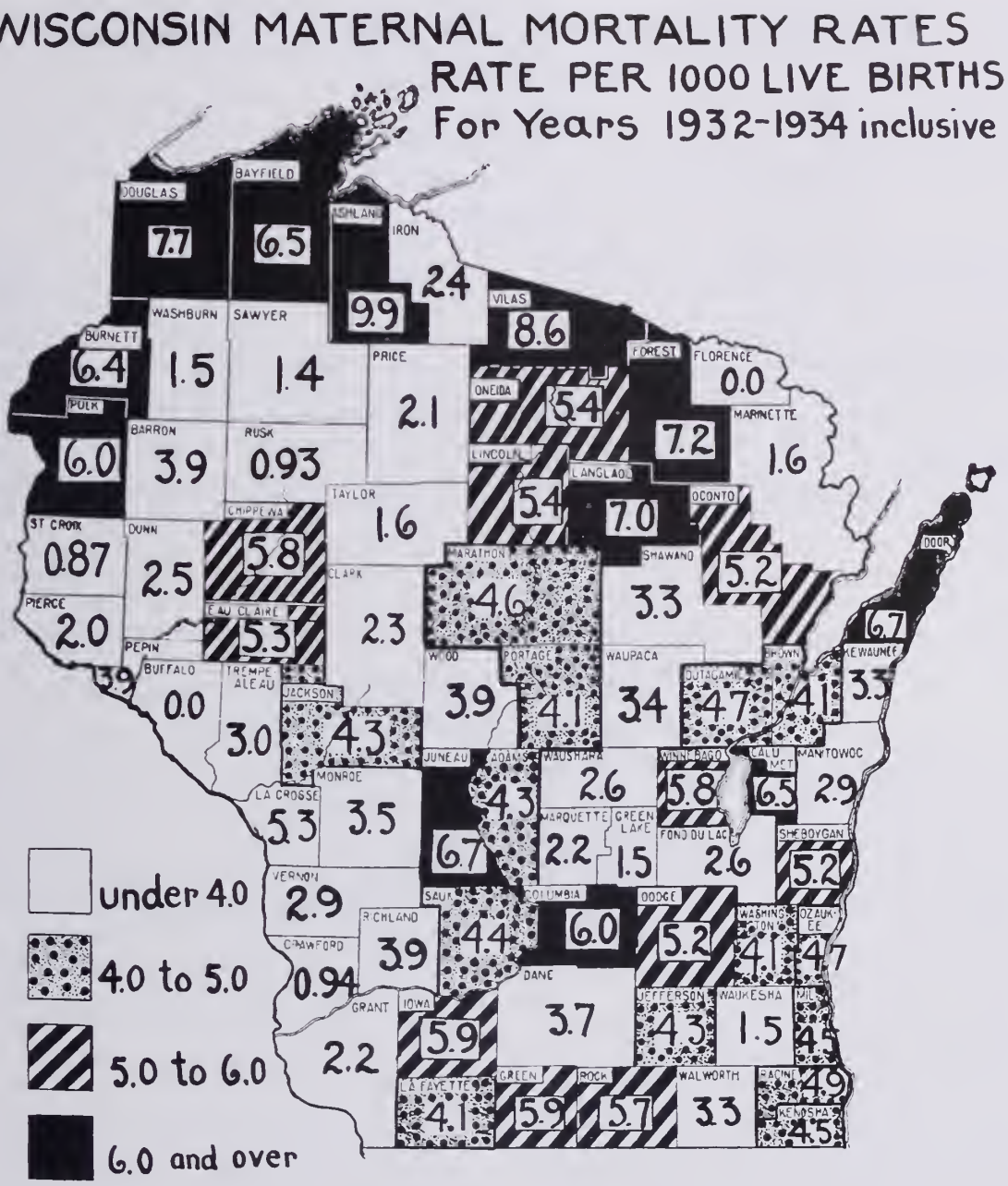
MATERNAL MORTALITY

The maternal mortality rates are especially interesting, for it is evident that so little has been accomplished to bring them down to a lower level although it has been clearly shown that a large per cent of these deaths are preventable. Records from other countries and from special studies in different parts of the United States show that it is



Map I

possible to reduce the maternal deaths to between 2.0 and 2.5 per 1000 live births. A study of Map II, will show that many Wisconsin counties have been able to do this. It is to be remembered that for the three-year period, 1932–1934 inclusive, all deaths and births were allocated for residence. Two counties, Florence and Buffalo, have had no maternal deaths. The counties with the lowest rates are the more rural counties. Of the counties with cities of 10,000 or over Dane again leads with a rate of 3.7. Many of the counties with large cities show a lower rate for the rural part of their counties. Dane, Milwaukee, and Racine counties stand out in contrast here with



Compiled by The Bureau of Child Welfare
Wisconsin State Board of Health

Map II

their city rates both for maternal and infant mortality definitely below those for the rural part of the counties.

A study was made of the maternal deaths in Wisconsin in 1927–28 and the results of that study were published in the February, 1930, issue of the Wisconsin Medical Journal. It was shown then that many of the maternal deaths were preventable. There were 766 maternal deaths in that two-year period, leaving 1,700 motherless children. Of these deaths, puerperal sepsis was responsible for 33%, eclampsia 25%, accidents of pregnan-

(Continued on page 694)

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OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN

« « « EDITORIALS » » »

DR. LOUIS FRANCIS JERMAIN (1867—1935)

Dean Emeritus, Marquette University School of Medicine

PRACTITIONERS of medicine and medical educators in Wisconsin deeply mourn the passing of Dr. Louis Francis Jermain. They send the consoling thought to his bereaved family that in all of his medical activities he is held in the highest esteem because his work in medicine is well done.

Those who knew Dr. Jermain as a consultant of internal medicine speak of his ability in the highest terms. He possessed equanimity midst surrounding stress; gave confidence and strength by his wise counsel; was just and generous to his fellow practitioners and emanated hope to his patients. He had a cheerful disposition that radiated its warmth to those who came in contact with him. He patiently bore the frailties of others and won their high regard. That he was held in high esteem by the medical profession was manifested in 1912 when he was elected president of the Milwaukee Academy of Medicine and again in 1915 president of the State Medical Society of Wisconsin.

Dr. Jermain gave unsparingly of his time to the cause of medical education in Wisconsin. In 1913 he became dean of the Marquette University School of Medicine, the period of the greatest upheaval education, in any field, has known. By a voluntary act the physicians of the United States, through the basic organization of medicine, the American Medical Association, adopted premedical and medical standards of the highest type. Medical schools were encouraged to unite with universities and adopt high scholastic objectives. Emphasis on laboratory methods meant the acquisition of a full time personnel and expensive equipment. During this period Dr. Jermain was active with officials of Marquette University in culminating the merger of the Wisconsin College of Physicians and Surgeons and the Milwaukee Medical College as the School of Medicine of Marquette University. Dr. Jermain was again active, with many others, at a later date in generously giving of his time to campaigning for the necessary basic endowment for the medical school. No one realizes the trials and tribulations of a dean, except others who have been in a similar position,

during the period of the early rapid growth of a medical school. Through it all, however, Dr. Jermain manifested calm judgment and good foresight in aiding the progress of medical education in Wisconsin. He received a well earned recognition from his fellow practitioners at the ninetieth anniversary meeting of the State Medical Society of Wisconsin when he was presented with the Council Award for his pioneer services as educator and dean of the Marquette University School of Medicine.

For thirty-six years, from 1894-1930, he was an inspiring practical teacher of internal medicine of many physicians practicing today in Wisconsin, in other states and in foreign lands. He was highly regarded because of his medical ability, sense of justice and kindness by the members of the faculty who served under him from 1913 to 1926 when he resigned as dean. He was then made Dean Emeritus of the Marquette University School of Medicine.

Dr. Jermain's interest was constantly manifested toward supplying capable conscientious physicians of good character for the state of Wisconsin and stressed the obligation of the medical profession toward the public in the prevention and cure of disease.

He was faithful to his trust as a physician, citizen, husband, father and friend, and as a communicant of his church. "Well done, good and faithful servant".

Requiescat in pace.

Oxygen Therapy

CAREFUL review of developments, particularly in the last three or four years, convinces us that oxygen therapy is no ephemeral passing fancy or fad, like the much over-publicised chlorine treatments for colds some years back. It is such a logical procedure and so simple in its application that, where properly administered, it is rapidly becoming one of the most valuable therapeutic agents. Nevertheless, the attention of the membership is directed to a few of the simple, but extremely important, essentials to be considered by the physician.

First is the recognition of the symptoms of moderate oxygen want, particularly of the anoxic type, where oxygen therapy may be beneficial. If oxygen is properly administered immediately upon recognition of these symptoms, the more acute stages of anoxia which approach terminal conditions may frequently be aborted. In other words, if you are going to use oxygen start it early, and, except in special cases, use it continuously and do not terminate the treatment abruptly.

The second and perhaps just as important phase of the subject is that when oxygen is administered, a therapeutic dose must be given. This requires some technical knowledge of the various forms of apparatus, which, even though quite simple, must be clearly understood. The apparatus used is being improved right along and detailed instructions furnished. Nevertheless, if the physician is not assured of competent handling of the equipment, he should acquire sufficient knowledge of the apparatus to instruct the house staff, technicians, and nurses so that an adequate dosage will always be maintained.

A quite complete bibliography of the literature on oxygen therapy is available to any members who may desire information on specific details of the subject. Researches now in progress in Madison and other parts of the country, when completed, are likely to add not only to our knowledge of the subject, but may extend the range of effective application to a greater number of conditions.

A remarkable thing about the comparatively recent acceleration in the use of oxygen is the almost unanimous agreement as to its beneficial effects, either in giving additional comfort to the patient, or in materially aiding recovery, or both. Statistically the figures are not complete, particularly since up to quite lately there has in very many cases been too much delay between diagnosis and treatment with oxygen.

Briefly the consensus of the best medical opinion is that if oxygen is indicated by the condition of the patient, it should be given early and continuously and by all means in effective concentrations. If this procedure is followed the physician will add one more most valuable and simple adjunct to his armamentarium. J.B.

. . . . THE PRESIDENT'S PAGE . . . .

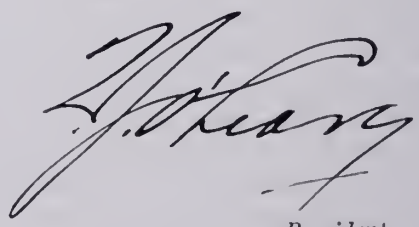
A Personal Invitation

SHORTLY after assuming the duties of President of this Society, I made a plea for increased membership and cooperation, so that we might have a well fortified defense. The response was most pleasing, as there has been a generous increase in the membership and a most loyal support of the individual members in their respective communities.

How timely this appeal was has been demonstrated many times during the past seven months. Our Secretary has been constantly occupied with the activities of the Legislature; on the alert to throw in all the reinforcements at his command to defeat some measure that was dangerous jointly to the profession and to the health of the general public. These reinforcements were mostly in the form of a hearty response of individual members in making local contacts with individual legislators. Our time has been occupied in defending our rights. This has been a defensive year against those who would destroy proper health protection standards. Our one main offensive movement was successful.

Since we are now on the eve of the Annual Meeting, I am taking this opportunity to extend a personal invitation to all the physicians of the state to attend the meeting in Milwaukee, and I sincerely hope the response will be one hundred per cent. It will be well worth while, because I know that the Scientific Committee has worked hard and long to provide a fine program. An attendance at the annual meeting is one way that you have of expressing your appreciation for the work to which your officers, particularly the members of the special committees, have given much of their time, not only this year but in past years, and most likely will continue to give in the future.

As this is my final message to you, I wish to thank the other officers and committee men for their splendid cooperation. I especially wish to thank the members at large for their staunch support whenever they were called upon. Your unfailing loyalty will continue to be the foundation upon which organized medicine will be perpetuated throughout the years.



President.

Society Proceedings

COLUMBIA

The regular meeting of the Columbia County Medical Society was held Tuesday evening, August 20th, at the Hotel Raulf, Portage.

Mr. Theodore Wiprud, Executive Secretary of the Medical Society of Milwaukee County, addressed the members and the Auxiliary on "Medical Economics", a subject of great interest and importance to the members, and one which we have apparently much less knowledge than some laymen.

A committee was appointed to confer with similar committees in adjoining counties in regard to poor relief regulations.

Another committee was appointed to investigate a credit system and report a plan at the next meeting.

The local dues were increased from $1.00 to $3.00 for the coming year. H. Y. F.

KENOSHA

Members of the Kenosha County Medical Society and the members of the Woman's Auxiliary enjoyed an outing at the Kenosha County Club on July 31st. The afternoon was devoted to playing golf while the Auxiliary members enjoyed a bridge party. A dinner and social hour concluded the meeting.

WINNEBAGO

The Winnebago County Medical Society held a meeting at Mercy Hospital, Oshkosh, to hear Dr. V. A. Gudex of the State Board of Health, who spoke on the examination of school children for tuberculosis.

TREMPEALEAU-JACKSON-BUFFALO

Members of this Society, together with their families and friends, enjoyed a cruise on the Mississippi in July aboard the Mayo yacht "North Star", combining the outing with the monthly meeting of the Society.

Dr. Waltman Walters, associate professor of surgery, University of Minnesota, Graduate School of Medicine, Rochester, was the guest speaker.

The Woman's Auxiliary

Mrs. Rock Sleyster, 1220 Dewey Ave., Wauwatosa, *President*
Mrs. F. Gregory Connell, 420 Washington Blvd., Oshkosh, *President-elect*
Mrs. George H. Ewell, 2024 Kendall Ave., Madison, *Secretary*
Mrs. Donne F. Gosin, 631 S. Quincy Ave., Green Bay, *Treasurer*
Mrs. Rogers N. Herbert, Nashville, Tenn., *National President*

Final Program For Seventh Annual Meeting of Auxiliary at Milwaukee, September 17-20

WOMAN'S AUXILIARY
To The
STATE MEDICAL SOCIETY OF WISCONSIN

Headquarters: Hotel Schroeder, Milwaukee
Registration—Lobby floor

Tuesday, Sept. 17, 1935

P.M.
6:30 Executive Board dinner—Banquet Room, 5th floor, Schroeder Hotel.

Address by Mrs. Robert E. Fitzgerald, National President-Elect.

Address by Mrs. Eben J. Carey, National Treasurer.

Music by members of Milwaukee's International Opera Chorus.

Executive Board meeting following the dinner. Mrs. Rock Sleyster, presiding.

Wednesday, Sept. 18, 1935

A. M.
10:00 General Meeting—Banquet Room, 5th floor, Schroeder Hotel. Mrs. Rock Sleyster, presiding.

Invocation—Rabbi Samuel Hirshberg.

Address of Welcome—Mrs. Harry J. Heeb, Milwaukee.

Response—Mrs. Arthur J. McCarey, Green Bay.

Business Session and Reports of County Auxiliary Presidents.

P.M.

1:00 Luncheon—Main dining room—Lobby floor—Schroeder Hotel. Tickets—$1.00.
Orchestral program and Style Show.

3:00 Tour of City
or
Trips to: 1. Museum, 2. Convalescent Home for Children, 3. Junior League Curative Workshop, 4. County Institutions.

Thursday, Sept. 19, 1935

A. M.

10:00 General Meeting—Banquet Room, 5th floor, Schroeder Hotel. Mrs. Rock Sleyster, presiding.
Business Session and Election of Officers.
Induction of the President, Mrs. F. Gregory Connell, Oshkosh.
Speaker—Dr. E. H. Cary, Dallas, Texas.

P.M.

1:00 Luncheon and Bridge party—Wisconsin Club. Tickets—$1.25.
Both auction and contract will be played. There will be table and door prizes.

3:30 Post-Convention Board Meeting—Banquet Room, Schroeder Hotel. Mrs. F. Gregory Connell, presiding.

6:45 Annual Dinner and Dance—Crystal Ballroom, 5th floor, Schroeder Hotel.

From Your President

Members of the Auxiliary are urged to attend the annual meeting in Milwaukee, September 17–20. A splendid program has been arranged and members will be particularly interested in the address on Thursday morning, September 19th, by Dr. Edward H. Cary of Dallas, Texas, a former president of the American Medical Association and now Chairman of the Legislative Committee of the American Medical Association. Dr. Cary is a brilliant speaker and will bring an important message.

Our Milwaukee County Auxiliary is making plans for the entertainment of its guests, which will insure a profitable and pleasant holiday. Every member of the Auxiliary is urged to show her interest and loyalty by registering early at the Hotel Schroeder and attending without fail the general meetings Wednesday and Thursday mornings, September 18th and 19th. It is in these meetings that the values of the Auxiliary become apparent. Do plan to attend and help us have a good Session.

Mrs. Rock Sleyster, President.

Hobby Exhibit Planned For Milwaukee Meeting

Mrs. Eben J. Carey of the Woman's Auxiliary has been appointed Chairman and Mrs. Charles Fidler, Vice-Chairman of a special hobby exhibit demonstrating the various fields of hobbies of members of the Medical Society of Milwaukee County.

Assisting Mrs. Carey and Mrs. Fidler is a large committee of the Auxiliary.

Thirty-six exhibits including paintings, etchings, an amateur broadcasting station, wood-working and handicraft, stamp collections, pheasants, model ships, and metal work have already been arranged. The exhibits will be held in Juneau Hall in the Auditorium directly across from the commercial-scientific exhibits and the registration booth.

TO DELEGATES AND ALTERNATES

The names of delegates and alternates from each of the nineteen county auxiliaries were published in the August issue of the Wisconsin Medical Journal; also the names of each county president and her alternate.

If the delegate of a county auxiliary cannot attend the annual meeting, she should notify her alternate.

In the event that both the delegate and alternate of a county auxiliary find it impossible to attend, the county president should be notified. If a new delegate or alternate is appointed (other than those published in Journal), it will be necessary for her to present a letter of credentials from the county president when she registers.

We want every Auxiliary represented.

Executive Board Meetings

The pre-convention meeting of the Executive Board will be held Tuesday, September 17th, in the Banquet Room, 5th floor, Schroeder Hotel, following a 6:30 dinner, with Mrs. Rock Sleyster, Wauwatosa, presiding.

The post-convention meeting will be held at 3:30 P. M. Thursday in the Banquet Room of the Hotel Schroeder, with Mrs. F. Gregory Connell, Oshkosh, presiding.

Members of the Executive Board are the state officers, state chairmen, directors of the State Auxiliary, and county presidents. An invitation is also extended to the presidents-elect of county auxiliaries.

AUXILIARY INFORMATION

Every woman attending the Convention of the State Society with her husband is cordially invited to all the meetings of the Auxiliary, whether now a member or not.

Every one is asked to register at the registration desk on the Lobby floor of the Schroeder Hotel.

Free transportation is provided for all.

Visit the Exhibits. They will be of particular interest to Auxiliary women.

Luncheon reservations should be made in advance at the registration desk.

News Items and Personals

Two Wisconsin physicians have been appointed to important offices of sections of the American Medical Association for the year 1935-1936. They are:

Dr. Hans H. Reese, Madison, who is Chairman of the Section on Nervous and Mental Diseases.

Dr. Harry R. Foerster, Milwaukee, who is Chairman of the Section on Dermatology and Syphilology.

—△—

On July 9th, Dr. H. P. Bowen of Watertown was commissioned by President Roosevelt to be postmaster of Watertown for a period of four years. He assumed his duties on July 21st.

—△—

Dr. E. S. Knox, Green Bay, was unanimously reelected department surgeon of the Wisconsin Veterans of Foreign Wars at the annual convention which closed at Marshfield on July second.

—△—

Dr. G. I. Hogue of Milwaukee returned the middle of August from a tour of duty as commanding officer of General Hospital No. 22 at Camp McCoy at Sparta.

—△—

Dr. Stuart C. Cullen and Dr. E. R. Muntz who have recently completed their services on the resident staff of Wisconsin General Hospital, Madison, have opened joint offices at 231 S. Main Street, Janesville. Dr. Cullen will practice general medicine and surgery while Dr. Muntz will specialize in obstetrics and gynecology.

—△—

A new unit, consisting of eight rooms, is being added to St. Mary's Ringling Hospital at Baraboo at an approximate cost of $8,000.

—△—

Dr. Edward N. Jacobson, Milwaukee announces the removal of his offices from 161 W. Wisconsin Ave., to suite 624 Empire Bldg., Milwaukee.

RADIO PROGRAM

The radio health talks of the State Medical Society are broadcast over the State-Owned Radio Stations, WHA, Madison, and WLBL, Stevens Point, each week on Tuesday, Wednesday and Thursday morning. During the summer months the health talks always are presented at 9:30 A.M. Beginning October first, the talks will be given at 10:30 A.M. and continue at that hour throughout the winter.

The schedule for the next month follows:

Sept. 10—Rewards and Punishments.
Sept. 11—Do You Know?
Sept. 12—The Health of the Mother.
Sept. 17—The Family Medicine Chest.
Sept. 18—The Death of Madame Curie.
Sept. 19—Curiosities of Medicine.
Sept. 24—The Quick Lunch.
Sept. 25—Do You Know?
Sept. 26—The Nervous Child.
Oct. 1—Health Slogans.
Oct. 2—The Infant.
Oct. 3—Do You Know?
Oct. 8—The Pituitary Gland.
Oct. 9—Lunch for the School Child.
Oct. 10—First Aid to Medical Terms.

Of the physicians who have been licensed in Wisconsin since June, the following have established themselves:

Dr. Frank K. Dean, son of Dr. Joseph Dean, councilor of the third district, became associated with the Dean Clinic, Madison.

Dr. Marvin A. Jochimsen has opened offices in the village of Grafton.

Dr. Frank B. Sazama is occupying offices at 322½ Bridge street, Chippewa Falls.

Dr. J. P. Wild has taken over the practice of Dr. H. L. Vogl, Milwaukee, who is taking postgraduate work for a year.

Dr. F. J. Hofmeister became associated with Dr. Carl Friedbacher, 5530 W. Burnham St., West Allis.

Dr. Harold O. Schneider, Monroe, will practice with Dr. D. D. Ruehlman of Monroe.

Dr. Herman Wolf has opened an office in the United States National Bank Building, Kenosha.

Dr. Hubert D. Grota has located at Baileys Harbor.

Dr. John A. Knauf will practice in Stockbridge where he will occupy an office in the bank building.

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Dr. E. L. Schroeder of Shawano has been appointed by the Works Progress Administration of the State, as personnel officer in the second district with headquarters in Green Bay.

BIRTHS

A daughter to Dr. and Mrs. L. P. Stamm, Milwaukee, on July 12th.

A son to Dr. and Mrs. Robert F. Purtell, Milwaukee, on July 19th.

A daughter to Dr. and Mrs. A. A. Schaefer, Milwaukee, on July 20th.

A son to Dr. and Mrs. Edward J. O'Neill, Milwaukee, on May 10th.

MARRIAGES

Dr. John A. Enright, Milwaukee, and Miss Cecilia Wocasek, Milwaukee, on July 6th.

Dr. Richard J. Dietz, Milwaukee, and Miss Evelyn A. Tobin, Milwaukee, on July 27th.

DEATHS

Dr. Louis Francis Jermain, Milwaukee, Dean of Marquette University School of Medicine from 1913 to 1926, and Dean Emeritus at the time of his death, died on July 24th at St. Joseph's Hospital, Milwaukee, of arteriosclerosis. He was taken to the hospital six months ago but had been in ill health for a year before that time.

He was born in the year 1867 and at the age of seventeen taught country school. Seven years later he entered Northwestern University receiving his medical degree in 1894. After graduation he came to Milwaukee to take over the practice of Dr. O. D. J. Hayes, also joining the faculty of Wisconsin College of Physicians and Surgeons where he taught from 1894 to 1912. From 1896 to 1910 he served as assistant health commissioner of Milwaukee. In 1913 he was appointed Dean of Marquette University School of Medicine, which position he held until 1926, and had been Emeritus Dean since that time.

In 1912 he was elected president of the Milwaukee Academy of Medicine and in 1915 served as president of the State Medical Society of Wisconsin. At the ninetieth anniversary meeting of the State Medical Society, Dr. Jermain was presented with the Council Award for his pioneer services as educator and Dean, and for his life work in the joint interest of the public and the profession.

During the World War, Dr. Jermain helped to organize the work of the United States Medical Corps in Milwaukee.

He was the author of several books on diseases of the lungs and a textbook for medical courses.

In 1920, Dr. Jermain founded the Jermain Clinic at 1705 W. Wisconsin Avenue, carrying on its activities with his son, Dr. William M. Jermain and Dr. A. F. Kustermann.

In 1924, he was made a knight of the Order of St. Gregory the Great by Pope Pius XI.

Dr. Jermain was a member of the Medical Society of Milwaukee County, the State Medical Society, and the American Medical Association.

Besides his widow and son, there survive two daughters, Mrs. Theresa Jaeckels, Milwaukee, and Mrs. Angeline Boemer of St. Paul.

"A GOOD CITIZEN PASSES ON"

"Coming to the end of his days on earth at mature age, loaded with honors for fine service in his profession and for his exemplary estimate of good citizenship, Milwaukee may well bow in sorrow at the death of Dr. Louis F. Jermain, Dean Emeritus of the Medical School of Marquette University.

"A son of Wisconsin, born at Manitowoc, he made his way upward by remarkable energy and keen understanding of his obligations as a physician to the human family.

"In addition to his unusual knowledge of medical science and willingness to serve all who asked his aid, his affability helped to endear him to the large number who will sincerely mourn his passing from life.

"His record of service during the forty-one years Dr. Jermain spent in Milwaukee is one of which his family and friends may justly feel proud."—Editorial, WISCONSIN NEWS, Milwaukee, July 24, 1935.

Dr. Lester M. Brooks, Milwaukee, died on July 23rd at his home in Milwaukee.

A native of Milwaukee, Dr. Brooks graduated from Marquette University School of Medicine in 1912. He entered private practice in Mendota, Wis., where he lived for nine years before returning to Milwaukee.

He is survived by his widow, a brother, Robert, and his parents, Mr. and Mrs. Myron Brooks, Milwaukee.

MEDICAL ECONOMICS

Because of the long legislative report to be found in this issue, the usual page on Medical Economics has been omitted. It will again appear in the October number.

Dr. J. W. Burns, Appleton, died at the home of his son, Dr. L. R. Burns at Two Harbors, Minnesota, on August 14th, at the age of ninety years.

He was born Dec. 11, 1845, on a farm near Oakfield. He attended Fond du Lac High school and received his medical degree from Rush Medical College in 1870. He practiced at Lomira and Oakfield and at Lake Crystal, Minnesota, and returned again to Oakfield in 1878. Fourteen years ago he moved to Appleton to establish a practice.

He is survived by three sons and one daughter.

Dr. Anthony J. Caffrey, Milwaukee, died at his residence on July 11th.

Dr. Caffrey was born at Kilbourn in 1871. His preliminary education was obtained at the Wyoming Seminary, Kingston, Pennsylvania. He received his medical degree from the Baltimore Medical College in 1898, following which he moved to Milwaukee and began his practice. He was an associate professor of medicine at the old Milwaukee Medical College and later at the Marquette University School of Medicine, which position he relinquished in 1924 to devote his entire time to private practice.

He was a member of the Medical Society of Milwaukee County, the State Medical Society, and the American Medical Association.

Survivors are his widow, and four children: Mrs. Lawrence Brock, Mary, Anthony, Jr., and Gerald, all of Milwaukee.

Dr. Robert A. Kitto, Racine, died on July 25th at Oconomowoc after a long illness.

He was born in the year 1863 and was a graduate of Rush Medical College in 1885. He had practiced medicine in Racine for nearly half a century.

Dr. A. E. Mieding, Milwaukee, died on July 23rd at Three Lakes, Wisconsin, of a fractured neck while diving in shallow water.

Dr. Mieding was born in the year 1865 and was a graduate of Milwaukee Medical College in 1906. He had practiced in Milwaukee for the past twenty-five years. Prior to his graduation, he owned a drug store at 1704 W. State Street, Milwaukee.

He was a member of the Medical Society of Milwaukee County, the State Medical Society, and the American Medical Association.

Survivors are his widow, and a sister, Mrs. Helen Steuber of Milwaukee.

Dr. Frank A. Southwick, Stevens Point, died on July 23rd at St. Michael's Hospital of pulmonary embolism.

Dr. Southwick was born at North Groton, New Hampshire, on May 14, 1858. He attended the Kimball Union Academy at Meriden, New Hampshire, Dartmouth College, and the Bowdoin Medical School, Portland, Maine, from which he graduated in 1881.

His first practice was in Buxton, Maine. In November, 1889, Dr. Southwick came to Stevens Point where a sister, Mrs. Laura A. Maxfield, was then living. He was active in civic and professional affairs and during his work as city health officer inaugurated the present system of preventive treatment of diphtheria and goitre prevention in school children. For thirteen years he served as secretary of the Portage County chapter of the Red Cross and was organizer of the Community County composed of representatives of all organizations in the city which had as its purpose the betterment of the community.

Mrs. Southwick preceded him in death in 1924.

Dr. Southwick was a member of the Portage County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by three daughters, Miss Louise Southwick at home; Mrs. R. Burton Keeler of New York City, and Miss Margaret Southwick of Gary, Indiana.

SOCIETY RECORDS

New Members

Fred O. Kuehl, Merrill.

Wesley L. Boyden, Brillion.

F. X. McCormick, 2645 S. Kinnickinnic Ave., Milwaukee.

Over One Thousand Registrations Anticipated for Ninety-Fourth Meeting, Milwaukee, September 17-20

WITH the publication of the final program in this issue, all plans have been completed for what is anticipated to be the largest meeting in the history of the State Medical Society of Wisconsin.

Scientific sessions on Wednesday, September 17, will be preceded by the Golf Tournament on Tuesday, the 16th, meeting of the Council the same day, and the first meeting of the House of Delegates Tuesday evening at the Schroeder Hotel. The scientific program on Wednesday will be opened by clinics conducted by department heads at the Milwaukee County Hospital, Wauwatosa, and the Milwaukee Children's Hospital, on West Wisconsin Avenue. Registration and ex-

hibits will open simultaneously at 8:00 o'clock Wednesday morning, and with the closing of the clinics at 10:00, opportunity will be given all to register and see the exhibits before the first general session in the Auditorium at 10:30.

Twenty distinguished out-of-state guests will appear during the course of the three-day scientific program and fifty-five presentations will be made by members from within the state. Out-of-state speakers will include:

1. **Dr. E. H. Cary, Past-President and now Chairman of the Committee on Legislative Activities of the American Medical Association, Dallas, Texas.**
2. **Dr. F. L. Knowles, Ft. Dodge, Iowa.**
3. **Dr. A. Graeme Mitchell, Professor of Pediatrics, University of Cincinnati.**
4. **Dr. Arthur J. Patek, Jr., Assistant in Medicine, Harvard Medical School.**
5. **Dr. Aaron Arkin, Chicago.**
6. **Dr. U. V. Portmann, Department of Roentgenology, Cleveland Clinic.**
7. **Dr. Louis G. Herrmann, Assistant Professor of Surgery, University of Cincinnati.**
8. **Dr. Ernest M. Hammes, Professor of Neurology and Psychiatry, University of Minnesota.**
9. **Dr. Henry W. Woltman, Professor of Neurology, University of Minnesota.**
10. **Dr. Harry Culver, Chicago.**
11. **Dr. G. J. Thompson, Rochester, Minnesota.**
12. **Dr. Hugh Cabot, Rochester, Minnesota.**
13. **Dr. Frederick A. Coller, Professor of Surgery, University of Michigan.**
14. **Dr. Simon Levin, Director of Medical Service, Isle Royal Mine, Houghton, Michigan.**
15. **Dr. Chas. M. McKenna, Professor of Genito-Urinary Surgery, University of Illinois.**
16. **Dr. Vernon C. David, Clinical Professor of Surgery, Rush Medical College.**
17. **Dr. Fremont A. Chandler, Assistant Professor of Orthopedic Surgery, Northwestern University.**
18. **Dr. Percival Bailey, Professor of Neuro-Surgery, University of Chicago.**
19. **Dr. H. E. Robertson, Professor of Pathology, University of Minnesota.**
20. **Dr. Waltman Walters, Associate Professor of Surgery, University of Minnesota.**

The address of the incoming president, Dr. Ralph M. Carter of Green Bay, entitled "What About the Future," will be presented before the general session at the Auditorium as the first address on the Thursday afternoon program. At this session members will also hear a summarized report of actions of the House of Delegates.

Thursday evening will be devoted to the Annual Dinner, which is by custom informal. Presentation of two Council Awards will be made at the conclusion of the dinner. The address of the evening will be made by Dr. E. H. Cary, Dean of the Medical School of Baylor University, Dallas, Texas. Dancing will conclude the evening.

The annual smoker will be held at the Schroeder Hotel at 9:30 Wednesday evening. The smoker will be preceded by the scientific paper by Dr. Herrmann.

GOLD MEDAL EXHIBITS

The largest number of exhibits in the history of the Society will be shown in Kilbourn, Walker, and Juneau Halls at the Auditorium during this 94th Anniversary Meeting. Features of the scientific exhibit will be the exhibit on Ergot by Dr. Fred L. Adair of the University of Chicago, and the exhibit on Diaphragmatic Hernia by Dr. Harrington of the Mayo Clinic. The exhibit by Dr. Adair received the gold medal in class 1 for original investigation at the scientific exhibits of the American Medical Association at Atlantic City in June. The exhibit of Dr. Harrington received the gold medal in class 2 of the same scientific exhibit.

Other scientific exhibits include an exhibit on Fractures by the Milwaukee Children's Hospital; Pathological Specimens from Milwaukee Hospital and Evangelical Deaconess Hospital; exhibit on Oral Surgery by Dr. R. P. Gingrass of Milwaukee; Roentgenograms of Lesions of the Stomach by Dr. M. E. Gabor, Milwaukee; exhibit on Scarlet Fever by the Milwaukee City Health Department; exhibit of Marquette University, including Pathological Specimens by Dr. M. Fernan-Nunez; Infra-Red Photography in Medicine by Mr. Leo C. Massopust; Oral Surgery, by Dr. Matthew N. Federspiel; exhibit on Goiter by Dr. Arnold S. Jackson, Madison; exhibit on Urology by Dr. George H. Ewell, Madison; Preventive Medicine and Medical Education by the American Medical Association; Tuberculosis, by the Wisconsin Anti-Tuberculosis Association; and exhibits on Pathology and Certain Aspects of Internal Medicine by the University of Wisconsin.

All scientific exhibits are being arranged

under the chairmanship of Dr. Eben J. Carey, Dean, Marquette University School of Medicine and Director for the Medical Science exhibits at the Century of Progress.

TECHNICAL EXHIBITS

Commercial-technical exhibits at the meeting, for which all available space was sold many weeks ago, will include the following exhibits:

Bard-Parker Company, Inc., Danbury, Conn.
Bilhuber-Knoll Corporation, Jersey City, N. J.
The Borden Company, New York, N. Y.
R. B. Davis Company, Hoboken, N. J.
The DeVilbiss Company, Toledo, Ohio.
General Electric X-Ray Corporation, Chicago, Ill.
Gerber Products Company, Fremont, Michigan.
Horlick's Malted Milk Corporation, Racine, Wis.
Hurley X-Ray Company, Milwaukee, Wis.
E. H. Karrer Company, Milwaukee, Wis.
Kellogg Company, Battle Creek, Mich.
Kremers-Urban Company, Milwaukee, Wis.
Lea & Febiger, Philadelphia, Pa.
McIntosh Electrical Corporation, Chicago, Ill.
Mead Johnson & Company, Evansville, Ind.
Medical Protective Company, Wheaton, Ill.
Mellin's Food Company, Boston, Mass.
Merck & Co., Inc., Rahway, N. J.
Philip Morris & Co. Ltd., New York, N. Y.
V. Mueller & Company, Chicago, Ill.
Petrolagar Laboratories, Chicago, Ill.
Roemer Drug Company, Milwaukee, Wis.
W. B. Saunders Company, Philadelphia, Pa.
Scanlan-Morris Company, Madison, Wis.
Sharp & Smith, Chicago, Ill.
United States Hospital Supply Co., Minneapolis, Minn.
U. S. Standard Products Co., Woodworth, Wis.

FEATURE HOBBY SHOW

An innovation of State Society meetings will be found in the upwards of thirty exhibits in Juneau Hall demonstrating the various hobbies of members of the Medical Society of Milwaukee County.

Hobby exhibits will include model boats and cruisers, guns, deep sea fishing and equipment, motion pictures, paintings, etchings, antiques, third dimension photography, craftsmanship, wood working and carving, electrical and chemical patents, a model amateur radio station, home plans, old and valuable first editions, stamp and card collections, pheasants, archery, and bees.

Milwaukee physicians who will participate in the hobby show will include:

R. M. Hall
E. F. Barta
Earl L. Baum
W. L. Stranberg
R. G. Washburn
Harold B. Miner
Carl Dunst
R. P. Wiesen
H. Harder
H. A. Heise
M. G. Peterman
S. L. Bornstein
Robert F. Purtell
B. P. Churchill
E. Cushing-Lippitt
Carl Henry Davis
Rock Sleyster
C. R. Schneider
H. G. Oakland
John McCabe
A. V. deNeveu
W. J. Houghton
David E. W. Wenstrand
C. H. Nichols
James C. Sargent
Merle Q. Howard
Clyde W. Morter
C. F. McDonald

PROGRAM SYNOPSIS

Tuesday, September 17

9:00 A. M.	Practice play, golf tournament, Blue Mound Country Club
12:00 M.	Council Luncheon Meeting, Hotel Schroeder
1:00 P. M.	Golf Tournament, Blue Mound Country Club
7:00 P. M.	House of Delegates, Fifth Floor, Schroeder Hotel

Wednesday, September 18

8:00 A. M.	Dry Clinics, Milwaukee County Hospital and Milwaukee Children's Hospital
8:00 A. M.	Registration and Exhibits open, Milwaukee Auditorium
10:30 A. M.	General Sessions, Auditorium
12:15 P. M.	Council Meeting, Directors' Room, Auditorium
1:30 P. M.	General Sessions, Auditorium
6:30 P. M.	House of Delegates, Fifth Floor, Schroeder Hotel
8:30 P. M.	Evening Session, Fifth Floor, Schroeder Hotel
9:30 P. M.	Smoker, Fifth Floor, Schroeder Hotel

Thursday, September 19

8:00 A. M.	House of Delegates, Fifth Floor, Schroeder Hotel
8:20 A. M.	General Sessions, Auditorium
12:15 P. M.	Council Luncheon, Directors' Room, Auditorium
12:30 P. M.	Radiological Section Luncheon, Schroeder Hotel
1:30 P. M.	General Sessions, Auditorium
6:45 P. M.	Annual Dinner, Schroeder Hotel

Friday, September 20

8:20 A. M.	General Sessions, Auditorium
1:25 P. M.	General Sessions, Auditorium
4:00 P. M.	Adjournment

J. Y. Malone
J. F. Wenn
R. E. Schade
R. W. Blumenthal

The hobby exhibit is under the immediate direction of the Woman's Auxiliary to the Medical Society of Milwaukee County. Mrs. Eben J. Carey is Chairman of the Special Committee, Mrs. Charles Fidler is Vice-Chairman and a large committee of the Auxiliary is assisting in planning this most interesting exhibit.

Several of the booths will show various types of motion picture hobbies with continuous showing of the pictures throughout the meeting days. The hobby exhibit will be directly across the hall from the commercial-scientific exhibits.

GOLF TOURNAMENT

Dr. J. E. Rueth, Milwaukee, has completed final arrangements for the Annual Golf Tournament to ge played at the Blue Mound Country Club.

The course will be open for practice play during Tuesday morning, September 17, and the Tournament will start promptly at 1:00 P.M. A single fee of $4.00 will cover the morning practice round, green fees, and dinner at six o'clock.

The President's Cup will again be awarded for low gross score and the Secretary's Cup as first prize for low net score. A complete prize list has been assembled by the Chairman who declares that it will be "a real party."

Application blanks were mailed all members just before September 1 and members desiring to enter the contest for either of the two first prizes are requested to make their reservation with Dr. J. E. Rueth, 3229 W. North Avenue, Milwaukee, prior to September 14. Members of golf clubs are requested to forward their official handicap and members and others are requested to send in the average of the season's five lowest scores.

Distinguished Speaker at Annual Dinner

No more active figure in the field of social medicine and medical legislation is to be found in the United States than Dr. E. H. Cary of Dallas, Texas, Past-President of the American Medical Association and now Chairman of its Committee on Legislation. Dr. Cary will be speaker of the evening at the Annual Dinner for members and their wives in the ballroom of the Schroeder Hotel at 6:45 Thursday evening, September 19. The dinner will be informal.

Throughout the emergency period Dr. Cary has spent week after week in Washington presenting the position of the medical profession in the field of medical legislation and social security.

Dr. Cary is Dean Emeritus of the Medical School of Baylor University, which he helped to found; Professor of Ophthalmology and Otolaryngology; former Trustee of the American Medical Association, and its President in 1932-1933; Past-President of the Texas State Medical Society, and of the Southern Medical Association, and now Chairman of the Committee on the Distribu-

tion of Medical Services of the Texas State Medical Association.

Dr. Cary's address will be preceded by the presentation of two Council Awards and following the address one of the leading dance orchestras of the state has been secured to play for the members and their wives.

House of Delegates Convenes Tuesday, September 17

MEETING at the Schroeder Hotel at 7:00 o'clock Tuesday evening, September 17 for its initial session, the House of Delegates of the State Medical Society will have one of the most significant meetings in the history of the Society. Subsequent sessions of the House will all be held at the Schoeder at 6:30 Wednesday evening, September 18, and at 8:00 Thursday morning, September 19.

Special reference committees of the House of Delegates will be announced by Speaker Gunnar Gundersen of La Crosse, at the first meeting of the House Tuesday evening. These committees will be on the subjects of Credentials, Resolutions, Reports of Officers, and on Reports of Standing Committees. Reports of all officers and committees will be summarized at the Tuesday evening session and opened for general discussion. The reference committees of the House will report at the Wednesday evening session at which time the reports will be before the House for final action.

A Committee on Nominations consisting of one delegate for each of the thirteen Councilor Districts will be selected at the first session of the House Tuesday evening. This committee will bring in one or more nominations for the offices of President-Elect, Speaker and Vice-Speaker of the House of Delegates, and a Delegate and Alternate Delegate to the American Medical Association.

The elections Tuesday evening will be held to fill the office of Councilor in five districts. These are:

1. Seventh District, —to succeed Dr. Spencer Beebe, Sparta, term expires.
2. Eighth District, —to succeed Dr. G. R. Duer, Marinette, term expires.
3. Ninth District, —to succeed Dr. Joseph F. Smith, Wausau, term expires.
4. Tenth District, —to succeed Dr. H. M. Stang, Eau Claire, term expires.
5. Thirteenth District, —to succeed Dr. I. E. Schiek, Rhinelander, term expires.

Supplementary reports of committees will also be presented at the Tuesday evening session and many recommendations of significance affecting major policies of the Society will be placed before the House for its consideration.

In addition to filling the office of President-Elect, the Delegates on Thursday morning will elect a Speaker of the House to succeed Dr. Gunnar Gundersen of La Crosse; a Vice-Speaker of the House to succeed Dr. James C. Sargent, Milwaukee; a Delegate to the American Medical Association to succeed Dr. Joseph F. Smith, Wausau; and an Alternate Delegate to succeed Dr. M. D. Bird of Marinette. In a message to Delegates and Alternates early in August, Speaker Gundersen announced that in an effort to expedite the mass of business that must come before the session, discussions will be limited to seven minutes unless consent of the House is given for continuance. The floor, however, has been opened to all Alternates and any member of the Society may address the House by indicating his desire to the Speaker prior to or during the meeting. All sessions of the House, including executive sessions, are open to any physician properly identified as a member of the State Society.

WEAR YOUR BADGE

To obviate complaints made at previous sessions that non-members were attending the sessions, guards will be posted at all session room doors.

Admittance will be by badge only. Please help us to eliminate complaints by wearing your badge to be obtained at the Registration Booth.

If your badge is lost a duplicate may be obtained at the Registration Booth.

WEDNESDAY, SEPTEMBER 18

8:00 A. M.–10:00 A. M. Dry Clinics.

I. Milwaukee County Hospital.
Dr. O. R. Lillie, Milwaukee, Chairman.
Two-hour dry clinics in each of the following departments:
Medicine—Differential Diagnosis and Treatment of the Anemias, Dr. Francis Murphy.
Urology—Dr. James C. Sargent.
Orthopedic Surgery—Dr. Herman Schumm.
General Surgery—Dr. Fred Stratton.
Obstetrics—Dr. Albert Lahman.
Eye, Ear, Nose and Throat—Dr. J. E. Mulsow.

II. Milwaukee Children's Hospital.
Dr. S. J. Seeger, Milwaukee, Chairman.
Series of surgical clinics by:
Dr. Stanley J. Seeger.
Dr. Charles Fidler.
Dr. Irwin Schulz.
Dr. A. A. Schaefer.

8:00–10:30 A. M. Registration and exhibits open, Auditorium.

10:30 A. M.–12:15 P. M. General Sessions, Plankinton Hall, President T. J. O'Leary, Presiding.

10:30 The Surgical Treatment of Delayed Ulnar Neuritis.
Dr. J. R. Regan, Milwaukee.

10:50 The Diagnosis and Treatment of Myasthenia Gravis.
Dr. M. O. Boudry, Fond du Lac.

11:15 Discussion, Dr. H. E. Marsh, Madison.

11:20 Edema—What Conditions Cause It? How Can It Be Treated?
Dr. L. M. Warfield, Milwaukee.

11:40 Discussion, Dr. E. M. Jordan, Green Bay.

11:45 The Treatment of Fracture of the Neck of the Femur. Film Showing Author's Method of Treatment.
Dr. F. L. Knowles, Fort Dodge, Ia.

12:10 Discussion, Dr. J. T. Jerome, Madison.

1.30 P. M.– 5:00 P. M. General Sessions, Plankinton Hall, President T. J. O'Leary, Presiding.

1:30 Scarlet Fever Immunization Among Children.
Dr. R. P. Schowalter, Milwaukee.

1:50 The Use of Human Convalescent Serum in Infectious Diseases.
Dr. Maurice Hardgrove, Milwaukee.

2:10 Discussion, Dr. A. B. Schwartz, Milwaukee, and Dr. Roy M. Greenthal, Milwaukee.

2:20 Some Further Studies on Non-Specific Factors Affecting the Tuberculin Reaction.
Dr. A. Graeme Mitchell, B. K. Rachford Professor of Pediatrics, University of Cincinnati College of Medicine, Cincinnati, Ohio.

"RIGHT ON TIME"

Members are advised that every session throughout the Annual Meeting will start exactly on the hour stated in the program. So far as possible the meeting will be run exactly on schedule. Members may assume that it will not vary at any time over five minutes from the published schedule.

2:50 Discussion, Dr. H. M. Coon, Stevens Point.

3:00 Intermission for viewing exhibits.

3:15 Present-Day Concepts in the Treatment of Anemia.
Dr. Arthur J. Patek, Jr., Assistant in Medicine, Harvard Medical School, Boston, Mass.

3:35 Tumors of the Lung and Their Differential Diagnosis.
Dr. Aaron Arkin, Chicago, Ill.

4:00 Factors Which Influence the Curability of Mammary Cancer.
Dr. U. V. Portmann, Head of Department of Roentgenology, Cleveland Clinic, Cleveland, Ohio.

4:30 Discussion, Dr. J. R. McNutt, Duluth, Minn., and Dr. H. B. Podlasky, Milwaukee.

4:40 The Treatment of Acute Suppurative Pleurisy. Motion Picture Film.
Dr. Joseph W. Gale, Madison.

8:30 P. M.–9:15 P. M. Evening Session—Schroeder Hotel, Ballroom, Fifth Floor, President T. J. O'Leary, Presiding.

8:30 The Treatment of Peripheral Vascular Diseases.
Dr. Louis G. Herrmann, Assistant Professor of Surgery, University of Cincinnati, College of Medicine, Cincinnati, Ohio.

9:15 Discussion, Dr. John L. Yates, Milwaukee.

9:30 P. M. Smoker, Ballroom, Fifth Floor.

THURSDAY, SEPTEMBER 19

8:20 A. M.–10:00 A. M. General Sessions, Plankinton Hall, President T. J. O'Leary, Presiding.

8:20 The Treatment of Acute Empyema.
Dr. Joseph M. King, Milwaukee.

8:40 Some Problems Relating to the Care of the Insane in Wisconsin.
Dr. Gilbert E. Seaman, Winnebago.

9:00 Spinal Cord Injuries.
Dr. Ernest M. Hammes, Professor of Neurology and Psychiatry, University of Minnesota Medical School, St. Paul.

9:30 Discussion, Dr. John L. Garvey, Milwaukee.

TELEPHONE CALLS

The State Medical Society, in cooperation with the Physicians' Service Bureau of Milwaukee, will maintain a special operator at the Milwaukee Auditorium and page service for the reporting of telephone calls. The number of the incoming call phone will be Broadway 8030.

9:35 Some Neurologic Postoperative Complications.
Dr. Henry W. Woltman, Professor of Neurology, University of Minnesota, Graduate School of Medicine, Minneapolis-Rochester.

10:00 Intermission to view exhibits.

10:15 A. M.–12:15 P. M. Four Sectional Meetings.

I. Section on Obstetrics and Gynecology, Englemann Hall, Dr. Roland S. Cron, Milwaukee, Chairman.

10:15 Treatment of Trichomonas Vaginalis.
Dr. Russell M. Kurten, Racine.

10:35 Discussion, opened by Dr. N. W. Bourne, Milwaukee.

10:45 Intra-Uterine Infections in Relation to Childbirth.
Dr. R. W. Roethke, Milwaukee.

11:05 Discussion, opened by Dr. Carl Harper, Madison.

11:15 The Management of Sterility.
Dr. Robert L. Cowles, Green Bay.

11:35 Discussion.

11:45 Evaluation of Laboratory Tests in the Toxemia of Pregnancy.
Dr. H. W. Shutter, Milwaukee.

12:05 Discussion.

II. Section on Urology, Juneau Hall, Dr. Walter M. Kearns, Milwaukee, Chairman.

10:15 A Comparative Study of a Series of Supra-Pubic Prostatectomies and Transurethral Resections.
Dr. H. E. Kasten, Beloit.

10:30 Metastatic Infections in the Genito-Urinary Tract.
Dr. G. H. Ewell, Madison.

10:45 The Relation of Nephrolithiasis and Bone Disease.
Dr. Ira Sisk, Madison.

11:00 Disturbances of the Female Urethra.
Dr. W. G. Sexton, Marshfield.

11:15 Traumatic Ruptures of the Male Urethra.
Dr. Harry Culver, Assistant Professor, Genito-Urinary Surgery, Chicago Medical College, Chicago, Ill.

11:35 Diagnosis and Treatment of Stone in the Ureter (Diagnosis and Transvesical Manipulation).
Dr. G. J. Thompson, Rochester, Minn.

11:55 Diagnosis and Treatment of Stone in the Ureter (Operative Treatment).
Dr. Hugh Cabot, Rochester, Minn.

III. Section on Medicine, Plankinton Hall, Dr. W. M. Jermain, Milwaukee, Chairman.

10:15 Laboratory Aid in Anemic Therapy.
Dr. Lorin E. Dickelmann, Oshkosh.

10:35 General Discussion.

10:45 Tularemia: Etiology, Diagnosis and Specific Treatment.
Dr. S. B. Pessin, Madison.

11:05 General Discussion.

11:15 Undulant Fever in Wisconsin.
Dr. Lindley V. Sprague, Madison.

11:35 General Discussion.

11:45 Periarteritis Nodosa.
Dr. Otho Fiedler, Sheboygan.

12:05 Discussion.

IV. Section on Radiology, Committee Room A, Second Floor, Dr. Theodore Sokow, Kenosha, Chairman.

10:15 Obstetrical Case Report.
Dr. L. V. Littig, Madison.

10:25 A Chest Case for Diagnosis.
Dr. J. N. Sisk, Madison.

10:35 Cicatricial Stenosis of the Esophagus.
Dr. Theodore Sokow, Kenosha.

10:45 Roentgen Diagnostic Case.
Dr. E. A. Pohle, Madison.

10:55 Roentgen Therapeutic Case.
Dr. E. A. Pohle, Madison.

11:05 Multiple Congenital Exostosis.
Dr. W. T. Clark, Janesville.

11:15 Gastro-Intestinal Case.
Dr. F. W. Mackoy, Milwaukee.

11:25 Congenital Cystic Lung.
Dr. R. P. Potter, Marshfield.

11:35 Technique of X-Ray Treatment of Carcinoma of the Breast.
Dr. U. V. Portmann, Department of Roentgenology, Cleveland Clinic, Cleveland, Ohio.

12:30 Radiological Section Luncheon, Schroeder Hotel. Relationship of Pathologist to Radiologist.
Dr. Norbert Enzer, Milwaukee.
The Life of Wilhelm Konrad Roentgen as Revealed in His Letters. Illustrated.
Otto Glasser, Ph.D., Director of Radiation Research Department, Cleveland Clinic Foundation, Cleveland, Ohio.

1:30 P. M.–5:00 P. M. General Sessions, Plankinton Hall, President T. J. O'Leary, Presiding.

1:30 Presidential Address. "What About the Future."
Dr. Ralph M. Carter, Green Bay, President-elect.

2:00 Announcements by Secretary.

Two popular sports in Milwaukee. Beautiful beaches, tricky greens.

2:05 Reconstructive and Plastic Surgery Relating to Injuries of the Mouth, Jaws, and Face.
Dr. M. N. Federspiel, Milwaukee.

2:30 Water Balance of Sick Patients.
Dr. Frederick A. Coller, Professor of Surgery and Head of Surgical Department, University of Michigan Medical School, Ann Arbor, Michigan.

3:00 Discussion, Dr. F. Gregory Connell, Oshkosh.

3:10 Intermission to view exhibits.

3:20 A Preliminary Report of the Committee of the Council on the Prevention of Goiter in the Children of Wisconsin.
Dr. Arnold S. Jackson, Madison, Chairman.

3:40 Dangers and Their Prevention in the Operative Treatment of Goiters.
Dr. Simon Levin, Director of the Medical Service, Isle Royal Mine, Houghton, Michigan.

4:10 Discussion, Dr. George V. Lynch, Oshkosh; Dr. Francis B. Murphy, Milwaukee; and Dr. John Huston, Milwaukee.

4:20 Symptoms Following Cholecystectomy.
Dr. W. J. Tucker, Ashland.

4:40 Discussion, Dr. Gunnar Gundersen, La Crosse.

4:45 Has the Pendulum Swung Too Far in the Conservative Treatment of the Ruptured Appendix?
Dr. C. W. Eberbach, Milwaukee.

5:05 Discussion, Dr. S. E. Gavin, Fond du Lac, and Dr. Henry J. Gramling, Milwaukee.

6:45 Annual Dinner, Schroeder Hotel, Ballroom, Fifth Floor.
Council Awards.
Address, Dr. E. H. Cary, Dallas, Texas, Chairman, Committee on Legislative Activities, American Medical Association.
Dancing.

FRIDAY, SEPTEMBER 20

8:20 A. M.–9:50 A. M. General Sessions, Plankinton Hall, President T. J. O'Leary, Presiding.

8:20 Clinical Experiences with Ultra Short Wave Therapy.
Dr. W. J. Egan, Milwaukee.

8:40 The Operative Technique for Cryptorchidism. Motion Picture Demonstration.
Dr. Charles M. McKenna, Professor of Genito-Urinary Surgery, University of Illinois College of Medicine, Chicago, Ill.

9:20 Obligations of Medical Science to the Public.
Dr. Eben J. Carey, Dean, Marquette University School of Medicine, Milwaukee.

9:50 Intermission to view exhibits.

10:10 A. M.–12:00 M. Three Symposiums.

I. Symposium on Tuberculosis, Juneau Hall, Dr. C. H. Stoddard, Milwaukee, Chairman.

10:10 Pulmonary Tuberculosis in Its Early Stages, and Its Diagnosis.
Dr. R. H. Stiehm, Madison.

10:35 The Problem of Handling the Early Case.
Dr. K. L. Puestow, Madison.

11:00 Tuberculosis and the Family Doctor.
Dr. Hoyt E. Dearholt, Milwaukee.

11:30 General Discussion, opened by the Chairman.

II. Symposium on Carcinoma of Rectum and Rectosigmoid, Englemann Hall, Dr. F. B. McMahon, Milwaukee, Chairman.

10:10 The Pathology of Carcinoma of the Rectum and Rectosigmoid.
Dr. Garner Scullard, Eau Claire.

The skyline of Milwaukee as seen from Lake Michigan

10:30 The Diagnosis of Carcinoma of the Rectum and Rectosigmoid.
Dr. A. G. Schutte, Milwaukee.

10:50 Cancer Antigen and Its Therapeutic Significance.
Dr. John L. Yates, Milwaukee.

11:10 The Surgical Aspects of Carcinoma of the Rectum and Rectosigmoid.
Dr. Vernon C. David, Clinical Professor of Surgery, Rush Medical College, Chicago, Ill.

11:40 General Discussion, opened by the Chairman.

III. Symposium on Silicosis, Plankinton Hall, Dr. Ralph G. Mills, Fond du Lac, Chairman.

10:10 The Pathogenesis of Human Silicosis.
Dr. Norbert Enzer, Milwaukee.

10:40 Urological Aspects of the Differentiation Diagnosis of Silico-Tuberculosis.
Dr. E. H. Habbe, Milwaukee.

11:00 Clinical Aspects of Silicosis.
Dr. O. A. Sander, Milwaukee.

11:30 General Discussion, opened by the Chairman.

1:25 P. M.–5:00 P. M. General Sessions, Plankinton Hall.

1:25 Induction of President Ralph M. Carter.

1:30 Pathological Conditions of the Female Urethra.
Dr. Cyril G. Richards, Kenosha.

1:50 Aseptic Necrosis of the Head of the Femur.
Dr. Fremont A. Chandler, Assistant Professor of Orthopedic Surgery, Northwestern University Medical School, Chicago, Ill.

2:10 Discussion, Dr. F. J. Gaenslen, Milwaukee, and Dr. John W. Powers, Milwaukee.

2:15 Experiences with Forced Drainage of the Central Nervous System.
Dr. Hans H. Reese, Madison, and Dr. Irving B. Shulak, Madison.

2:35 Peculiarities of Intracranial Tumors in Childhood.
Dr. Percival Bailey, Professor of Neurosurgery, School of Medicine of the Division of the Biological Sciences, University of Chicago, Chicago, Ill.

3:05 The Value of Postmortem Examinations to the Practice of Medicine.
Dr. H. E. Robertson, Professor of Pathology, University of Minnesota, Graduate School of Medicine, Rochester.

3:35 The Various Operative Procedures Indicated in the Treatment of Peptic Ulcer.
Dr. Waltman Walters, Associate Professor of Surgery, University of Minnesota, Graduate School of Medicine, Rochester, Minn.

4:00 Adjournment.

Alcohol Regulations and Permits; Official Statement

By HON. ROBERT K. HENRY
State Treasurer of Wisconsin

IN THE last issue of your publication I had occasion to discuss with you the matter of new legislation affecting alcohol used for medicinal purposes. I, at that time, stated that I would have ready, within the near future, application blanks necessary to apply for a medicinal permit to purchase and use alcohol for medicinal purposes. I am glad to advise you that those application blanks are now ready.

The permit is issued free of charge and *permits the holder thereof to receive shipments of alcohol in inter-state commerce.* It is absolutely essential that a permit be held by anyone receiving shipments in interstate commerce, otherwise the common carriers will refuse to make delivery. As soon as I have a sufficient number of permits issued, the Beverage Tax Division will compile a list of all permit holders, giving their names, addresses and permit numbers. These lists will be distributed to all common

carriers located in the State of Wisconsin with instructions that shipments of alcohol cannot be released to persons not holding such permits and whose names do not appear on such lists. It is therefore imperative that those persons desiring to apply for medicinal permits do so within the near future to assure being placed upon this list. Naturally I will present supplemental lists from time to time or as conditions warrant.

I have placed in the hands of Mr. Crownhart a supply of these application blanks and they may be obtained either from him or by writting to A. J. Palmer, Director, Beverage Tax Division, Madison, Wisconsin.

At a later date forms for reporting shipments will be forwarded to all persons holding the permit. These reports will perhaps have to be filed with the Beverage Tax Division quarterly.

I appreciate very much the cooperation which the State Medical Society of Wisconsin and Mr. Crownhart have given us. I stand ready, at all times, to reciprocate.

Should you have any question or suggestion in reference to the intoxicating liquor law, particularly medicinal alcohol, please feel free to call upon me at any time.

AMENDED LAW

176.04 (3) No license shall be required for the use of intoxicating liquor in hospitals or in bona fide institutions for the aged and infirm where such liquor is used for medicinal, mechanical, or scientific purposes only, or for one licensed to practice surgery or medicine in using alcohol in any form in the bona fide treatment of the sick or in using or prescribing such alcohol for such bona fide treatment. *However, a permit to receive shipments of such intoxicating liquor must first be obtained from the state treasurer as otherwise provided for in section 176.404.*

176.404 MEDICINAL PERMIT. (1) Any person who proves to the state treasurer that he uses alcohol for medicinal purposes may be issued a "medicinal alcohol permit" which shall allow such person to purchase and use alcohol for such purposes only.

(2) Shipments made of such alcohol shall be conspicuously labeled "for medicinal purposes" and shall meet such other requirements as the state treasurer may prescribe by regulation.

(3) Such permit shall be issued by the state treasurer without fee.

Nearly 400 Attend State Society—University Cancer Clinics in State

SOME 382 members of the State Medical Society of Wisconsin of the State Medical internes and senior students attended various of the six cancer clinic centers held in Wisconsin during the second week of July, according to figures just compiled by Mr. Chester Allen, director of field organization of the University Extension Division. The course was conducted under the auspices of the Cancer Committee of the State Medical Society, and the University of Wisconsin Extension Division.

The team for the course consisted of Dr. W. D. Stovall, Madison, Chairman of the State Medical Society Cancer Committee; Dr. Ellis Fischel, of St. Louis; Dr. W. P. Healy, of New York City, and Dr. Frank L. Rector, Evanston, Illinois, Regional Representative of the American Society for the Control of

Cancer. Lectures and clinics were given by Doctors Fischel and Healy, and public meetings were held in the evening for an illustrated lecture by Dr. Rector.

Attendance of members at the session were 58 at Racine; 71 at Appleton; 61 at Wausau; 52 at Eau Claire; 59 at La Crosse, and 81 at Madison. The chart accompanying this article prepared by the Extension Division, indicates the territory from which this attendance was drawn throughout the state. The course was exactly self-supporting on the basis of the cost registration fee of $4.00 which was charged.

Report on Legislative Work of the Committee on Public Policy

THIS report covers the period beginning with the convening of the legislature on January 9th through the legislative week ending August 24th.

In that period of time, 1,045 bills have been introduced in the Assembly and 542 in the Senate, making a total of 1,587 bills. All of these have been carefully studied as rapidly as introduced, and of them 127 have been directly or indirectly concerned with public health, medical economics, or medical, hospital and clinical services.

The State Medical Society caused three of these measures to be introduced—the State Medical Grievance Committee Bill (enacted into law); the Medical Lien Bill (defeated); and the Enabling Bill designed to enlarge the power of the Society, (enacted into law).

Approximately an even dozen measures have been actively opposed by the Society, including the cultist legislation of the chiropractors and naturopaths, three anti-vivisection measures, the measure seeking to confer rights of action for prenatal injury,

THE LONG WAY TO A LAW

That each may appreciate the long channel through which even an unopposed measure must pass on its way to become a law, we are reprinting herewith the legislative record on the Medical Grievance Committee Bill.

No. 267, A.,

A bill to create sections 147.195 and 20.445 of the statutes, relating to the state medical grievance committee, and making an appropriation.

2—21.	A.	Introduced by Mr. GROVES, by request of the State Medical Society of Wisconsin.
2—21.	A.	Read first and second times and referred to committee on Public Welfare.
3— 7.	A.	Reported without recommendation.
3—14.	A.	Ordered engrossed and read a third time.
3—20.	A.	Report correctly engrossed and referred to committee on Third Reading.
3—21.	A.	Report correct.
3—21.	A.	Referred to committee on Finance.
4—12.	A.	Report amendment No. 1, A., and passage recommended.
4—16.	A.	Amendment No. 1, A., adopted.
4—16.	A.	Ordered engrossed and read a third time.
4—16.	A.	Rules suspended.
4—16.	A.	Read a third time and passed. Ayes 85, Noes 0.
4—16.	A.	Ordered immediately messaged.
4—16.	S.	Received from Assembly.
4—16.	S.	Read first time and referred to committee on Education and Public Welfare.
4—25.	S.	Report concurrence recommended.
5— 8.	S.	Read a second time.
5— 8.	S.	Ordered to a third reading.
5— 8.	S.	Rules suspended.
5— 8.	S.	Read a third time and concurred in.
5— 9.	A.	Received from Senate concurred in.
5—13.	A.	Report correctly enrolled.
5—16.	A.	Report approved 5—14.

(Chapter No. 70. Published May 16th.)

legislation detrimental to the enforcement of the medical practice act, and others.

The Society has sponsored many amendments to other measures in order that such legislation would not contain provisions detrimental to the public health. Some of such bills include those affecting the availability of dogs for scientific purposes, measure of damages in malpractice compensation cases, fees for medicinal liquor permits, socialized medicine, narcotic drugs and many others.

Amendments to all bills have received careful attention to prevent an apparent unimportant or irrelevant measure from being amended so as to become of vital interest to the medical profession. A conservative estimate places the number of such amendments at approximately 2,500.

While not all bills are discussed in connection with this report, we have attempted to summarize those of more important interest. For readability, we have classified these bills under four general headings—which follow in order named.

1. Important measures.
2. Measures potentially of importance.
3. Measures potentially of importance and now defeated.
4. Measures now laws.

1. Important Measures

STATE AID TO HOSPITALS CARING FOR COUNTY CHARGES

812, A. Mr. Novotny, Oshkosh, Democrat. This bill provides that in cases where indigents are treated at the Wisconsin General Hospital or in other hospitals, the cost of such treatment shall be paid one-half by the state and one-half by the county of the legal settlement of the indigent. This bill was introduced on April 30 and after a hearing by the Assembly Committee on State Affairs, was reported without recommendation on May 16. It was then referred to the Joint Committee on Finance. It was subsequently recalled from the committee and referred to the Assembly calendar. The Assembly killed the measure by a vote of 40—37.

712, A. Mr. Staudenmaier, Marinette, Democrat. This measure is similar to 812, A., discussed above. On May 23 the measure was laid on the table pending disposition of 812, A. On July 25 the Assembly refused to advance the measure.

FREE CHOICE OF PHYSICIANS

88, A. Dr. Barber, Marathon, Progressive. This measure as originally worded provided that no relief agency, employer, etc., should in any manner induce, persuade or attempt to influence an injured or sick person to engage in a professional character any physician or surgeon or to change from one physician to another. Amendments were adopted eliminating the application of the bill to relief agencies or employers. Following this action, the measure was referred to the Committee on Judiciary for further hearing. The measure was again amended following the Committee hearing by substitute amendment 2, A., offered by Dr. Barber so as to restore the provisions relative to relief agencies and employers, and to exempt life insurance companies in counties or cities where a county or city physician is employed continuously. This amendment was adopted by a vote of 76—7 and the measure as amended was then passed. The bill was advanced to the Senate and had a hearing before the Senate Committee on Education and Public Welfare. The Committee recommended the bill for killing. The Senate killed the measure on July 31 by a vote of 17 to 15.

WORKMEN'S COMPENSATION ACT

680, A. Committee on Insurance and Banking. This measure proposed to set up what is to be known as the "Workmen's Compensation Security Fund" for the purpose of making payment of unpaid claims under the Workmen's Compensation Act. The fund will be secured by a 1% premium assessed against insurance company policies. The measure was amended and passed in the Assembly on August 8.

The Senate referred the bill to the committee on Corporations and Taxation but recalled the bill from the committee before action had been taken on the bill. This measure is scheduled to receive Senate action on August 27.

NEW STATE HOSPITAL

401, S. Committee on Education and Public Welfare. This measure which was introduced on May 4 provided for the establishment of a new state hospital to be located in Madison for the observation, diagnosis and treatment of the sick and particularly of persons afflicted with mental diseases.

The hospital would be under the direction of the University of Wisconsin School of Medicine.

Doctors on the medical staff of any county hospital for the insane would be required to devote at least two weeks of each year to psychiatry work in this hospital. The measure received an unfavorable report in the Joint Committee on Finance and was killed by the Senate 22—9.

CARE OF INDIGENT—COMMUNICABLE DISEASES

628, A. Mr. Busby, Milwaukee, Progressive. This bill proposes to amend chapter 143 of the statutes pertaining to the treatment of communicable diseases, providing that in counties where the county system for the care of the indigent has been adopted, the county would be responsible for the expense of this care and hospitalization. The measure was introduced on April 4 and had several hearings. Passed by the Assembly and the Senate amended the bill to apply only to Milwaukee County. The measure now goes to the Governor for his signature.

STATE CURATIVE AND PENAL INSTITUTIONS

370, S. Senator Kelly, Fond du Lac, Democrat. This measure provided for changes in laws relating to the governing of state curative and penal institutions. The state board of control furthermore would be required to appoint a director of medicine and physical welfare, licensed to practice medicine in this state, responsible to the state board of control and state board of health.

The measure passed the Senate by a vote of 13—7 but was killed by the Assembly 49—28.

COMMITMENTS TO HOSPITALS FOR INSANE

123, S. Senator Ingram, Eau Claire, Progressive. This bill proposes to set up new machinery respecting commitments to hospitals for the insane and would provide that the county judge appoint two disinterested physicians to examine the person believed to be insane. Such physicians would have to be duly licensed to practice and have had two years' experience in medical practice or one year's experience after graduation as a physician in an insane hospital. The county judge would be required to keep a list of such qualified physicians.

The measure would also require the physicians to give notice to the person to be examined, withholding the name of the applicant if they deem it wise, but if in their judgment such notice should be injurious, they may withhold the notice also.

Three substitute amendments have been introduced to the measure, two by the author of the bill. Substitute amendment 1, S., would restore much of the present law and would keep the judge active in the whole procedure. After giving the notice required, the judge could commit such individual to a hospital or asylum or to the Wisconsin General Hospital for examination for a period not to exceed 30 days and require two physicians from the staff of any such hospital to file reports concerning the case.

Substitute amendment 2, S., would insert a whole new section in lieu of the present section of the statute, being less detailed in nature.

The Senate adopted substitute 2, S., on August 1, but killed the measure on August 15. Subsequently a motion was made in the Senate to reconsider their action and laid the bill aside temporarily.

APPROPRIATIONS FOR HEALTH PROMOTION

17, A. Executive Budget Bill. This measure is of interest to the medical profession only insofar as the appropriations are concerned with the State Board of Health, the University of Wisconsin Medical School, and other similar groups. The measure was passed in the Assembly, but has met with considerable difficulty in the Senate where a substitute amendment by Senator Carroll was finally adopted. The medical school has not been greatly affected except for reductions of salaries, and the state department of health will be able to continue its program of preventive health measures and specifically the enforcement of the medical practices act, regardless of whether the Assembly or Senate measures become the law. At the present time it seems inevitable that the two houses will require a committee on conference to iron out their present differences so far as the budget is concerned, or else the Progressive-controlled Assembly will concur in the measure as amended in the Senate so that the measure may be sent to the Governor, where, under the present law, he may veto any unit of the bill without affecting the remaining units.

STATE AID FOR COUNTY PUBLIC HEALTH NURSES

100, A. Mr. Harper, Lancaster, Progressive. This measure proposes to create new sections to the statutes to provide that the state shall pay annually to each county in which one or more certified county public health nurses are employed the sum of $1,000.00. The Committee on Public Welfare reported without recommendation, and on February 28 the measure was referred to the Committee on Finance where it received an unfavorable report.

SALES TAX

315, A. Mrs. Kryszak, Milwaukee, Democrat. This measure proposes to create a sales tax on any "transfer of ownership of title of tangible personal property for use and not for resale". The measure was of importance to the medical profession in that it would require purchasers of medicine to pay a sales tax, and medicinal preparations and instruments used by the physician in the treatment of the sick would also be taxed.

The Assembly Committee on Taxation reported the bill without recommendation, and it was killed in the Assembly.

170, S. Senator Bolens, Port Washington, Democrat. This bill is similar to Assembly bill 315, A., introduced by Mrs. Kryszak, which provides for a sales tax and would affect the medical profession and hospitals in that articles purchased for use in the treatment of patients would be taxed, and prescriptions, remedies, etc., would also be taxed.

On February 20, this measure was referred to the

Senate Committee on Corporations and Taxation where it is still pending.

BURIAL OF INDIGENTS

729, A. Committee on Labor. This measure provided in its original form that in counties where the subject matter of poor relief is administered by the county, the county board may in its discretion provide for the burial of bodies of indigents, by the services of a licensed mortician in private cemeteries at a cost to the county of not to exceed $75.00. Means were set up whereby state charges could be charged over to the county and, where an inquest has taken place, the coroner shall cause the body to be buried or cremated at an expense of not to exceed $75.00. Mr. Kiefer offered substitute amendment 1, A., to the measure which provided for the burial of indigents in private cemeteries at a cost not to exceed $75.00. The substitute amendment by by Mr. Kiefer followed report of the Committee on Finance that the measure should be indefinitely postponed. The bill was then re-referred to the Committee on Public Welfare and subsequently passed by the Assembly.

The interest of the medical profession in the measure lies in the fact that the source of bodies for scientific purposes for medical schools lies in securing the bodies of unclaimed deceased indigents. If this measure should be passed, it seems probable that schools would have difficulty in securing the bodies for such purpose.

An amendment was adopted in the Senate which granted medical schools the privilege of securing bodies for scientific purposes. The Senate then passed the bill but subsequently rescinded their action and laid the bill aside for further action.

LIQUOR CONTROL COMMISSION

398, A. Mr. Beggs, Rice Lake, Progressive. This bill proposed to create a liquor control commission to administer provisions of the statute relative to the sale of intoxicating liquors.

The present provision of chapter 176, by which physicians and hospitals are eliminated from the necessity of obtaining permits for the use of intoxicating liquors and from the provision of the tax law relative to the taxation of alcohol, are to be repealed.

The measure is now in the Committee on Finance together with substitute amendment making certain changes in the original bill.

MEDICAL RELIEF OF INDIGENTS

262, S. Senator Shearer, Kenosha, Republican. This bill proposed the repeal of chapter 49 of the statutes dealing with relief and the enactment of 19 new sections of the statutes dealing with the whole subject of relief. Sections of the statute affected include that defining relief as in part consisting of medicine, medical treatment, hospital care, ambulance service, nursing and other such care as elements of relief. Also affected is that section of the statutes providing for emergency treatment of the indigent, the passage of which was secured by the medical profession in 1933. The measure was referred to the Senate Committee on Education and Public Welfare, and reported by them without recommendation. This bill was before the Senate for action on August 23, but when reached by the Senate it was laid over until August 28.

APPLICANTS FOR MEDICAL LICENSES

494, S. Senator Brunette, Green Bay, Democrat. This bill proposes to amend those sections of the statutes relating to the licensing of physicians, so that applicants would be required to have a diploma from a professional school, approved by the Board of Medical Examiners.

This measure was introduced at request of the Board, in order that they may avoid the situation in which applicants meet the requirement that diplomas be required by presenting diplomas issued by "diploma mills".

The measure was referred to the Senate Committee on Education and Public Welfare, but recalled from the Committee before they had had an opportunity to act on the bill. The Senate advanced the bill to final passage on August 20.

ENFORCEMENT OF MEDICAL PRACTICE ACT

495, S. Senator Brunette, Green Bay, Democrat. This measure proposes to transfer the duty of enforcing the medical practice act from the State Board of Health to the Board of Medical Examiners.

It is opposed by the State Medical Society on the basis of its experience during the period when this enforcement duty previously rested with the Medical Examiners. At that time it was found that defendants, almost without exception, emphasized that they were being prosecuted by a group of physicians, whose interests could only be selfish. Consequently, the transfer of this responsibility to the State Board of Health was made, with much better enforcement results.

The measure was referred to the Senate Committee on Education and Public Welfare, but recalled from the Committee before being acted on by the committee. The Senate killed the bill on August 20 by a vote of 22—9.

APPROPRIATION FOR ENFORCEMENT OF MEDICAL PRACTICE ACT

1007, A. Joint Committee on Finance. This measure is proposed for the purpose of continuing the annual $2,500 appropriation to the State Board of Health for the enforcement of the medical practice act. At the present time, the pending budget measure proposal covers this activity in the general appropriation to the State Board of Health, a deviation from the past policy of making specific appropriations for this purpose. Other appropriations to various state departments are included in the

measure which was referred to the Committee on Joint Finance for hearing. The Assembly recalled the bill from the committee and passed the measure on August 15.

MALPRACTICE IN COMPENSATION CASES

168, S. Senator Ingram, Eau Claire, Progressive. This bill proposed to amend the statutes relating to malpractice in workmen's compensation cases. Under the present law an employer who has paid compensation for injuries caused or aggravated by the tortious acts of a third party (physician) has a remedy against such third party and the employe also has a cause of action for the alleged malpractice *less the compensation already received by him.* Under 168, S., the physician and surgeon would still be subject to the two independent actions for alleged malpractice, but in the action by the employe the compensation paid to him would not be deductible from the damages he might recover. Legal counsel advises that he could not "see any other than increased damages if the physician and surgeon could not deduct the compensation paid by the employer to the employe beause of the aggravated injury resulting from the alleged malpractice."

The bill was finally recalled from the Senate Committee on Judiciary to which it had been referred, and was withdrawn by the author from further consideration on July 2, 1935.

PHYSICIANS' REPORTS IN COMPENSATION CASES

169, S. Senator Ingram, Eau Claire, Progressive. This bill and bills 933, A., and 966, A., deal with a similar subject, namely, the extent of a physician's report to an employer in workmen's compensation cases. Under the present law, contained in section 102.13 (1) of the statutes, an employe having a right to compensation shall, upon written request of his employer, submit from time to time for examination by a practicing physician provided and paid for by the employer. The employe is entitled to have a physician, provided by himself, present at any such examination. Any physician present at such examination may be required to testify. If an employe does not submit to such examination, his right to begin or maintain any proceedings for the collection of compensation shall be suspended.

933, A., would require any physician attending or examining an employe at the request of an employer or insurance carrier to give to the employe the same written report or oral report given to the employer, except where such report is deemed inimical to the interest of the employe and then in such case a copy of the report or memorandum shall be filed with the Industrial Commission. The bill has been passed by the Assembly, and the Senate Judiciary Committee reported the bill for killing. On August 20 the Senate killed the bill without a roll call.

966, A., proposes a similar amendment except that no discretion would rest in the surgeon as to whether to deliver such report to the Commission or to the injured employe. Passed by the Assembly and reported for killing by the Senate Committee. The Senate killed this measure on August 20.

Bill 169, S. proposed a similar amendment to that just noted above except that such report shall be given to either the employe or his representative. The interest of the medical profession in these three measures was concerned in the extent of discretion placed in the physician as to whom such a report should be given. Obviously there would be many cases when it would be dangerous to the health of the employe, or to his recovery, to inform him of the exact findings from time to time.

Bill 169, S., was finally withdrawn by Senator Ingram.

SECURING DOGS FOR SCIENTIFIC PURPOSES

253, S. Senator Carroll, Prairie du Chien, Democrat. This measure was most important in that the substitute amendment to the measure which was adopted in the Senate would have imposed upon the local assessor the duty of impounding, killing and burying every dog found untagged or for which a license has not been obtained. No discretion was vested in the assessor as now rests in the sheriff or other such official to dispose of the dogs by other means than by killing it. Consequently dogs impounded by the assessor under this measure could not have been used for scientific purposes.

The State Medical Society secured adoption of an amendment providing that such dogs could be disposed of for scientific purposes. The bill itself was defeated in the Assembly.

355, S. Committee on State and Local Government. This measure refers to the dog license fund in Milwaukee County, and in its original form was not important. However, on June 13, substitute amendment 1, S., was offered which would empower Milwaukee County to contract with the humane society for the operation of the dog pound. It was clear that the practical effect of the substitute amendment would be to prevent the Marquette School of Medicine or hospitals from obtaining dogs for scientific purposes. An amendment was sponsored by the State Medical Society which would require the humane society to make such dogs available to hospitals and medical colleges for scientific purposes without charge. This amendment was offered by Senator Shenners, and was adopted and the bill was passed by the Senate.

Antivivisectionists made an unsuccessful effort to remove the amendment in the Assembly and the bill was killed.

MEDICAL LIEN LAW

909, A. Mr. Thompson, Richland Center, Republican, at request of State Medical Society. This measure has been discussed in the various legislative

bulletins and in previous issues of the Journal. The bill related to assignments of indemnity or damages for personal injury. In essence, the bill provided that, where the patient consents, hospitals may be given a legal assignment for the amount of the hospital bill in accident cases. Such assignment could also run to the physician performing the services and the medical supplies used in treatment.

The bill was opposed by the insurance companies despite the fact that it had been carefully drafted to meet every valid objection. The measure was killed in the Assembly on June 21 by a vote of 52—36. The full discussion of Assembly action on this measure appeared in the July Journal.

SOCIAL INSURANCE

719, A. Committee on Labor. The bill as originally drafted would direct the Industrial Commission to set up a broad system of unemployment insurance. Substitute amendment 1, A., would extend this power to all forms of social insurance for the purpose of "providing compensation for all workers and farmers who are unable to work because of sickness, old age, maternity, industrial injury, or any other disability . . . compensation for disability because of maternity shall be paid to women during eight weeks previous and eight weeks following child birth."

The Committee on Labor to which the measure was referred recommended that the substitute amendment be adopted and that the bill as amended be passed. On June 18, the Assembly adopted the substitute amendment but indefinitely postponed the measure without a roll call.

MEDICAL RELIEF IN MILWAUKEE COUNTY

618, A. Mr. Kretlow, Milwaukee, Democrat. This measure proposed to set up a whole new system of medical relief in Milwaukee County. Its importance to the medical profession in that county cannot be exaggerated. It was opposed by the State Medical Society of Wisconsin, the Medical Society of Milwaukee County, the Milwaukee County Board of Supervisors, and the Milwaukee County Council. The measure, apparently introduced at the instance of a local physician, was 18 printed pages in length, designed apparently to furnish medical services to indigents, state, county, and city employes and to such other persons as may be on a subsistence wage level. It was estimated that the bill would affect the delivery of medical services to not less than 100,000 and perhaps as many as 200,000 Milwaukee County residents. The system proposed would be completely under the regulation of the county board. Federal funds would not be available, dispensary services would be eliminated, and other equally important objections prevailed against the measure.

A number of amendments were introduced, and as a last attempt a sales tax was attached to the measure in the hope of providing a method of financing it. After legislative action which covered a period of three months, the bill was indefinitely postponed on June 18 without a roll call. On June 19, an attempt was made to revive the bill which was killed 45—35.

ANTENUPTIAL PHYSICAL EXAMINATION

195, A. Mr. Franzkowiak, Milwaukee, Democrat. This bill provided for the repeal of the present section of the statutes requiring antenuptial physical examination of men. The bill was referred to the Committee on Public Welfare which recommended indefinite postponement, and on April 25, the measure was indefinitely postponed by the Assembly without a roll call.

190, S. By Committee on State and Local Government at request of Mrs. Hipke, the bill providing that the present statute should be amended so that both men and women would be required to have prenuptial examinations in like manner as is now required of men.

This measure was introduced in the senate on March 5, but was indefinitely postponed by a vote of 20—8 after a favorable report by the Committee on Education and Public Welfare.

507, A. Mr. Murray, Milwaukee, Republican. This bill is similar to bill 190, S., providing for antenuptial physical examinations of both sexes. The bill as worded would set no statutory limit on the fee for the examination and would penalize any physician issuing a certificate to a person other than the one known by him to be the applicant contemplating marriage.

The Assembly passed the bill, but the Senate refused to concur in the measure, adhering to the position it had earlier taken with respect to 190, S.

POOR RELIEF—COUNTY SYSTEM FOR MEDICAL CARE

593, A. By Committee on Public Welfare. This bill proposed to create a new section of the statutes making it the duty of the county board to provide medical, dental and hospital care and treatment for all poor persons receiving relief. This would change the present law providing that either a county or city may administer the relief in its district. Consequently, there would be the inevitable result, in some counties, of the county having responsibility for medical relief, and cities, villages, etc., having responsibility for relief generally. Emergency situations would be difficult to handle. Many counties would probably be forced to employ county physicians, and there would probably be duplication of efforts and agencies.

The bill which was introduced March 26 was indefinitely postponed in the Assembly May 17.

HEALTH OFFICERS

498, A. Mr. Vogel, Manitowoc, Progressive. This measure proposed amendments to certain sections of the statutes, the one of particular interest

to the medical profession being that contained in amendment 2, A., eliminating the present provisions respecting residency requirements of health officers and permitting health officers to hold their office for indefinite periods of time.

The Committee on Elections recommended indefinite postponement and on June 25, after adopting amendment, the Assembly indefinitely postponed the bill.

REORGANIZATION OF STATE DEPARTMENTS

354, A. Mr. Beggs, Rice Lake, Progressive. This measure proposed to enable the Governor to require any state commission, bureau, or department to reorganize or reallocate the administration of its functions. The measure was important from the medical viewpoint in that if it were passed the Governor would have the power to require reorganization of such units as the State Board of Health, the Board of Medical Examiners, and other similar bodies.

After a hearing before the Assembly Committee on State Affairs, which recommended indefinite postponement, Mr. Beggs secured the permission of the Assembly to withdraw the measure.

CHIROPRACTIC TITLE "DOCTOR"

517, A. Mr. Blomquist, Adams, Progressive. This bill proposed to amend the present law relative to the use of the title "Dr." so as to enable chiropractors to use the title "Dr. of Chiropractic" or "D.C."

The measure was actively opposed by the State Medical Society on the ground that it would qualify in the public mind such cultists as being capable and able to treat all forms of sickness. The measure, however, was passed in the Assembly on May 22 by a vote of 60—28. On July 16, the measure came before the Senate for a vote and the Senate refused to concur in the measure by a viva-voce vote.

On August 14, five weeks after this bill (517-A) which would have given chiropractors the title of "Dr." had been killed in the Senate, Senator Phillip Nelson, Superior, introduced a resolution in the Senate to revive this bill. The resolution was a "blind resolution", inasmuch as it referred to the number of the bill only and inasmuch as the title of the bill read "Treating the Sick".

The resolution was discovered on the afternoon of the day it was introduced and only 14 hours before Senate action. The resolution was killed, on motion of Senator Callan, by a voice vote and without a dissenting vote.

NATUROPATHS

451, A. Messrs. Kaiser and Grobschmidt, Milwaukee, Progressive and Democrat, respectively.

This bill proposed to permit that class of cultists known as naturopaths or nature healers to be licensed in this state and to practice their cult and to use the title "N.D." and to engage in every field now practiced by physicians and surgeons, and would have all the rights of physicians and surgeons, with the exception of the use of narcotics.

The measure was strenuously opposed by the State Medical Society on the ground that it was inimical to the public health. The measure was advanced by the Assembly by a vote of 49—35, but on June 25, the Assembly refused to pass the measure by a vote of 68—19, and on July 3, refused to reconsider the vote by which passage was refused by a vote of 53—28.

CHIROPRACTORS EXEMPT FROM BASIC SCIENCE LAW

421, A. Mr. Busby, Milwaukee, Progressive. The principal feature of this bill was to make the provision whereby chirepractors would take an examination by the Wisconsin Chiropractic Board and would be exempt from the examination given by the Basic Science Board.

The measure met the strenuous opposition on the part of the State Medical Society and various interested health officials, throughout the state. The measure was finally indefinitely postponed in the Assembly on May 29, by a vote of 45—40.

CHIROPRACTORS TREATING COMPENSATION CASES

403, A. Mr. Grobschmidt, Milwaukee, Progressive. This is one of the four cultist measures before the legislature this session. This measure would permit, if the employer did not otherwise elect, chiropractors to treat compensation cases under the workmen's compensation act and be paid thereby. The bill did not relieve the injured workman from the responsibility of obtaining adequate medical or surgical care if that should be necessary. After a bitter fight, the measure passed the Assembly, but was killed in the Senate on July 16, by a viva-voce vote.

PRENATAL INJURIES

285, A. By Mr. O'Malley, Milwaukee, Democrat. This bill was similar in effect to that introduced by Mr. O'Malley in the 1933 session of the legislature. The bill proposed to create a new section of the statutes providing that whenever a child was so far advanced in prenatal age that, should parturition by natural or artificial means occur at such age, such child would live separably from its mother, such child should have a right of action for injury "wantonly or negligently inflicted upon its person at such age of viability".

The State Medical Society appeared in opposition to the bill as worded and pointed out to the Committee the difficulties that attending physicians would meet in obstetrical cases.

The measure was recommended for indefinite postponement by the Committee on Judiciary and on April 25 by a viva-voce vote the Assembly indefinitely postponed the measure.

COST OF MEDICAL CARE

137, S. Senator Groves of Madison, Progressive. Providing for the creation of an interim committee to study the cost of medical care. This bill, introduced on February 14, would have required the proposed committee not only to investigate the general subject of the cost of medical care, but also to determine the ways and means "of lightening the burden thereof". The proposed committee would have consisted of two senators, three assemblymen, and two citizens, and would have had the general power of all investigating committees including that of subpoenaing witnesses, requiring production of documents, records, etc.

The measure was referred to the Senate Committee on Education and Public Welfare and after a hearing this Committee recommended to the Senate that the measure be indefinitely postponed. The measure was brought to a vote on March 27, 1935, and was indefinitely postponed at that time by a vote of 19—10.

297, A. This measure, identical with Bill No. 137, S., was introduced by Mr. Sigman of Two Rivers, Progressive, which was engrossed in the Assembly without a roll call and was passed by a vote of 54—32. The measure received the same treatment at the hands of the Senate as did 137, S., being nonconcurred in by a vote of 17—10.

QUARANTINE

10, A. By Mr. Trego, Merrill, Progressive. This measure was introduced January 18 by request of Mr. Peterson, Lincoln County Board member and was referred to the Assembly Committee on Public Welfare. The measure proposed to amend the statute so as to require a physician treating a communicable disease not only to report such case to the local health officer as is now required, but also to immediately quarantine the infected place and the family and to post his own placards.

After a hearing on the bill, during which its passage was urged on grounds of economy, the Committee on Public Welfare recommended to the Assembly that it be indefinitely postponed. The Assembly on February 28 indefinitely postpened the bill without roll call.

DISPOSAL OF WISCONSIN MEMORIAL HOSPITAL

174, S. Committee on Education and Public Welfare. This measure proposed the continuation of the interim committee created in 1933 for the purpose of determining disposition of the Wisconsin Memorial Hospital. The Senate passed the measure without a dissenting vote and the Assembly concurred in the Senate action by a vote of 93—1. The Governor vetoed the measure on the basis that the adjutant general's department was thoroughly prepared to take full charge of the matter and that for this reason there was no necessity to continue the interim committee and the necessary appropriations.

TESTS FOR INTOXICATION

188, A. Dr. Barber, Marathon, Progressive. This bill, introduced on February 13, proposed to create a new section of the statutes making it the duty of police officers, etc., taking into custody a person believed to be under the influence of an intoxicant to obtain from such person a sample of his blood and urine if same could be obtained with such individual's consent or, at least, without his objection, and to have a test made thereof for the determination of its alcoholic content.

The Committee on Public Welfare recommended indefinite postponement of the bill, and on March 1. the Assembly indefinitely postponed the bill by a viva-voce vote.

ADMINISTRATION OF SILVER NITRATE

70, A. Dr. Barber, Marathon, Progressive, at request of State Board of Health. The present law provides that silver nitrate be distributed free to local health officers in quantities sufficient to enable delivery to each physician and midwife. Because this method was proven to be wholly efficient, this measure provided for direct distribution by the State Board of Health. The bill further provided that every physician and midwife attendant upon a confinement case be required to drop a one per cent solution of nitrate of silver into the eyes of a newborn child, thus not confining the physician and midwife to the use of the solution supplied by the Board of Health, as formerly.

The Committee on Public Welfare reported the measure without recommendation, but the Assembly advanced the bill by a vote of 50—45. On March 8, however, the bill was indefinitely postponed without a roll call, and although attempts were made to revive the measure, the Assembly refused to consider the bill further.

STATE PHYSICIANS

488, A. Mr. Fitzsimons, Fond du Lac, Democrat. This measure was offered to the Assembly on March 13 and provided for the creation of a new section of the statute providing that state physicians, whether employed in the Wisconsin General Hospital or other state institutions, could not treat the sick unless a graduate of a class "A" medical school as classified by the American Medical Association.

The Assembly Committee on Public Welfare, after conducting a hearing on the measure, recommended that the bill be indefinitely postponed. When the measure came up before the Assembly for a vote, Mr. Grobschmidt proposed an amendment providing that

such state physicians must be graduates of a "reputable" medical school and exempted the Wisconsin General Hospital from the operation of the measure by specifically naming the Mendota State Hospital and other state institutions as those coming within the requirements as set out by the amendment. Mr. Grobschmidt's amendment was adopted without roll call, and on April 16, the measure was indefinitely postponed by a viva-voce vote.

MALPRACTICE OF CHIROPRACTORS

948, A. Committee on Elections, at request of Dr. Barber. This bill proposed a new section of the statutes to provide that anyone practicing chiropractic who "shall fail to perform or who shall negligently or unskillfully perform or attempt to perform any duty assumed which is ordinarily performed by authorized practitioners" shall be liable to the penalties and liabilities for malpractice.

The measure was apparently intended to require of chiropractors the same skill as that required of practitioners of medicine and surgery. Under the law in this state as it now exists, the skill of a practitioner is tested by the skill of the profession in question generally.

This measure was heard by the Committee on Public Welfare and was indefinitely postponed on June 4 by a vote of 61—28.

REORGANIZATION OF BOARD OF CONTROL

951, A. Mr. Novotny, Oshkosh, Democrat. This bill related to the reorganization of the state board of control and proposed changes in its powers, duties and functions. The portion of the bill which was of interest to the medical profession was the proposal to require appointment to the state board of control among others of "a neurologist, a psychiatrist and a sociologist or criminologist chosen by the faculty of the University of Wisconsin upon recommendation of the board of regents, a physician and surgeon duly licensed to practice in the state of Wisconsin, appointed by the Governor upon his own nomination or from a list of three submitted to him by the State Medical Society."

The measure was heard by the Assembly Committee on State Affairs which recommended indefinite postponement, and on July 12, the measure was indefinitely postponed by a vote of 47—39.

ANTIVIVISECTION

226, A. By Mr. O'Malley, Milwaukee, Democrat. This measure was the first of three antivivisection bills, the other two of which will be discussed independently. The measure would prohibit custodians of a pound from permitting any animal in their custody to be used for experimental or commercial purposes, including educational demonstration, medical, scientific, or experimental purposes of any nature.

The measure was referred to the Assembly Committee on Municipalities which recommended indefinite postponement on March 29. The Assembly indefinitely postponed the measure by a viva-voce vote on March 29.

160, S. By Senate Committee on Education and Public Welfare. This measure proposed to create a new section of the statutes specifically prohibiting vivisection upon dogs. The measure was heard by the same Committee which introduced the bill and after the hearing the Committee recommended to the Senate that the measure be indefinitely postponed. The Senate indefinitely postponed the bill without a roll call on April 5.

This bill was more limited in effect than 226, A., for the latter referred to animals while this measure was confined to dogs.

345, S. Committee on Education and Public Welfare. This was the third antivivisection measure to be introduced in the legislature. The present law pertaining to torture of animals specifically provides that nothing under that law shall be construed as forbidding experiments carried on for scientific research. The bill sought to repeal that provision of the law with the consequent result that scientific research, if such became the law, would be considered by the courts as cruel and inhuman treatment.

The State Medical Society and the two medical schools opposed the measure which was defeated by a viva-voce vote on May 24.

LICENSING OF LIFE INSURANCE INVESTIGATORS

765, A. By Committee on Insurance and Banking. This bill provided for the licensing of individuals, firms, etc., making reports to or for any insurance company regarding an applicant for life insurance, accident or health insurance. The bill specifically exempted physicians duly licensed to practice medicine.

The importance of this measure to the medical profession lay in making sure that the exemption of physicians from the effect of the bill was not removed. The measure was heard by the Committee on Insurance and Banking and following the committee's recommendation the Assembly indefinitely postponed the bill on June 11.

SOCIAL SECURITY

504, S. This bill provided for a system of old age pensions, school aid and aid to dependent children. The Society was interested in this bill only for the purpose of watching Amendment 1, S., which carried the provision that a Commissioner of Public Welfare was to be appointed. The Society was particularly interested to determine just what duties were assigned to the Commissioner of Public Welfare. The author of the bill (Senator Nelson) withdrew his amendment and the vital interest of the Society was erased.

1036, A. This bill was in a large measure similar to Bill 504, S., in that the bill was introduced

to make it possible for Wisconsin to participate to the fullest extent in the Federal Social Security program. This bill was of particular interest as it made provisions for the acceptance of Federal money for child welfare, aid to crippled children and any and all grants in aid to Wisconsin under the Social Security Act. This bill provided, as did 504, S., by amendment 1, S., for the appointment of a Commissioner of Public Welfare whose duties would be to correlate all of the activities of the Federal Government in the field of public welfare. The Joint Committee on Finance held a public hearing on this bill on August 13 and on August 15 the Committee recommended the bill for passage. The Assembly passed the measure on August 23.

2. Measures Potentially of Importance

COLLECTION AGENCIES

850, A. Mr. Howard, Milwaukee, Democrat. This measure, introduced May 1, pertains to the requirements of the present law requiring collection agencies to secure licenses and file bonds. The present law now exempts professional men's associations from the requirement, but under the provisions of this bill such associations would no longer be exempt.

Amendments making various changes in the bill were adopted and the measure passed the Assembly. One of the amendments is to exempt non-profit professional men's associations from the effect of the bill.

INSPECTION OF WELLS—LICENSES TO WELL DRILLERS

734, A. Committee on Labor. This bill provides new duties for the state board of health with respect to drinking water, and the powers of the board requiring certain tests, licenses of well drillers, etc.

The measure was passed in the Assembly and is now in the Senate.

TAXES

502, A. Mr. Carow, Ladysmith, Progressive. This measure, which is the subject of much controversy in both houses, proposes to do away with local taxation for maintaining schools, and shifting taxes necessary to support this activity over to income and luxury taxes so that the cost of such activity will be borne by the state rather than the local community.

The measure was passed by the Assembly but was killed by the Senate on August 23.

Its importance to the medical profession, aside from the question of governmental economics involved, lies in the methods by which this additional sum of money estimated to be in the neighborhood of $80,000,000 would be raised, and what specific items would be considered luxuries as distinguished from necessities.

EXAMINER OF BLIND AND DEAF

364, A. Mr. Kostuck, Stevens Point, Progressive. This measure proposes revision of the statute relating to pensions for the blind and deaf, and proposes that after its enactment the examiner of the blind and deaf would be required to be a physician specializing "in the treatment of ailments of the eye and ear".

OLD AGE ASSISTANCE

202, A. Interim Committee on old age assistance. This measure in its present form does not affect the medical aspects of old age assistance and will become important to the profession only if amendments are offered pertaining to this field. The bill was passed by the Assembly.

MUNICIPAL GOVERNMENT

199, A. Mr. Thomson and Mr. Busby, Richland Center and Milwaukee, Republican and Progressive.

This measure is designed to eliminate certain inconsistencies in the present statutes governing city and municipal government. The bill is important only insofar as amendments might be proposed which might offer changes in the public health administration.

The measure passed the Assembly and the Committee on Judiciary in the Senate reported the measure without recommendation. The Senate, however, concurred in the measure.

STATE BOARD OF HEALTH REVOLVING FUND

474, A. Mr. Millar, Menomonie. Progressive. This bill proposes to create sections in the statutes providing that all money received by the State Board of Health from licenses and other requirements should be placed in a revolving fund to enable the Board of Health to carry out the provisions of the law relative to barbers, beauty salons, restaurants, etc.

The measure was engrossed in the Assembly on April 4.

POOR RELIEF ADJUSTMENTS

385, A. Mr. Sibbald, Grandview, Progressive. This measure proposes changes in the present law relative to the method of poor relief adjustments between municipalities and also proposes amendments of section 49.18 (2) relative to emergency hospitalization which was enacted into law in 1933 at the request of the Medical Society. The latter change suggested would permit residents of other municipalities to be given emergency treatment and

the municipality in which he was a resident but in which he was not located at the time of his sickness would be required to pay the cost of his emergency treatments. Placed on Assembly table.

563, A. Mr. Wegner, Milwaukee, Socialist. This bill is similar to *305, A.*, which is discussed above. It proposes the creation of what is to be known as the "Wisconsin Public Improvement Authority" which under the provisions of the bill would appear to have such broad powers that it could deal in and supply drugs and perhaps even medical services. The measure was introduced March 22 and on April 5 was referred to the Committee on State Affairs. This measure passed the Assembly on August 23.

AUTOMOBILE DRIVERS' LICENSES

352, S. Committee on Agriculture and Labor. This bill proposes a number of amendments to the present automobile driver's license law and would require in part that every applicant for an operator's license meet certain examinations and tests prescribed by the secretary of state. The secretary of state would also be empowered to require a medical examination as distinguished from a physical examination as is now the law, but no physician could charge more than $2.00 therefor. An amendment was adopted in the Senate which required an examination of the vision of the applicant and such other examinations as may be required by the secretary of state.

SECURING MEDICAL CARE IN AUTO INJURY CASES

300, S. Committee on Highways. This measure was referred on April 8 to the Committee on Highways for hearing. The bill relates in general to accidents on highways and in part would provide that the driver of any vehicle involved in an accident "shall render to any person injured in such accident reasonable assistance including the carrying or the making of arrangements for carrying of such person to a physician, surgeon or hospital for medical or surgical relief", if it is apparent that such is necessary or is requested.

The measure passed the Senate on May 24, and was passed by the Assembly in an amended form.

COSMETIC ART

252, S. Senator Phillips, Milwaukee, Democrat. This bill is similar to bill 292, A., pertaining to cosmetic arts. It has been the subject of much controversy in the Senate, and several amendments and substitute amendments have been proposed.

The measure is now pending before the Senate.

PENALTY FOR NON-PAYMENT OF JUDGMENTS ARISING OUT OF AUTOMOBILE ACCIDENT

213, S. Senator Severson, Iola, Progressive. This bill proposes to create a new section of the statutes to provide that any person liable under a judgment to pay damages which arose out of an accident in which he was involved shall be denied the right to drive an automobile until the judgment is paid and such judgment would stand as a first lien against the motor vehicle.

COMPULSORY AUTO INSURANCE

176, S. Senator Severson, Iola, Progressive. This bill provides for compulsory automobile insurance. This bill is before the Committee on Corporations and Taxation for further action.

SILICOSIS

172, S. Joint Finance Committee. This bill relates to silicosis and provides for the installation of a dust eliminating machine in the granite finishing place at the state reformatory; provides for the expenditure of $50,000 to construct a new building at the state reformatory and to experiment with a view to developing adequate removal of silica dust from the breathing zone of the workers; and provides for a wage loss compensation of 70% of annual earnings.

On February 21 the measure was referred for hearing to the Joint Committee on Finance which recommended passage. The Senate passed the bill on August 23.

COST OF MAINTENANCE OF PATIENTS IN STATE INSTITUTIONS

71, S. Senator Dempsey, Hartland, Democrat. This measure proposes to increase the basis for computing the expense for maintenance, etc., of "inmates of state or county hospitals or asylums for insane" from $4.20 to $4.80 per day. This would include the Wisconsin General Hospital.

The measure which was introduced on January 30 was referred to the Senate Committee on Education and Public Welfare for hearing which recommended passage. On March 1, it was advanced in the Senate and referred to the Joint Committee on Finance.

3. Measures Potentially of Importance and Now Killed

CARE OF INDIGENT

149, A. Mr. Sieb, Racine, Progressive. This bill provides that persons in charge of administering relief should not use the word "pauper" when addressing or referring to any person receiving relief because of unemployment. The measure was passed

in the Assembly, but the Senate refused to concur in the bill.

RELIEF OF UNEMPLOYED

305, A. Mr. Kiefer, Milwaukee, Socialist. This bill proposes the creation of the "Wisconsin Production Corporation" for the relief of unemployment. The corporation would have power to "distribute and sell any and everything that may be considered necessary to an American standard of living for the agricultural and industrial workers".

The measure received active support of many organizations throughout the state. The Assembly Committee on State Affairs recommended passage of the measure, and it was then referred to the Joint Committee on Finance. The Assembly killed the bill on August 15 by a vote of 48—36.

HOURS OF LABOR

274, A. Committee on Labor. The bill as originally worded would require the employer operating factories or mercantile establishments to allow every person working therein, except as otherwise provided, a 24-hour consecutive rest period. The interest of the State Medical Society lay in the question of whether the measure might be extended to include other establishments than those specified. Although the measure passed the Assembly, without a roll call, the Senate non-concurred in the measure 22—7.

978, A. Mr. Robinson, Platteville, Republican. This bill relates to hours of labor during the present emergency and would provide that no employer could employ "any person for more than six hours in any calendar day or more than 30 hours in any calendar week". The bill provides detailed arrangements whereby help could be hired for longer periods of time in cases of necessity and for contracts, rules, regulations, etc.

The bill specifically excludes registered and practical nurses and student nurses from the operation of the measure. On August 14 the Assembly killed the bill by a vote of 50—37.

MEAT CUTTER'S LICENSE

334, A. Mr. Bay, Kaukauna, Progressive. This measure proposed to license meat cutters, requiring them to furnish to the State Board of Health each year a certificate of a licensed physician certifying that the applicant was not suffering from communicable disease or from any venereal disease in a communicable form. The measure was before the Assembly for action on a number of occasions, and several amendments were introduced. The measure was finally killed when the Assembly voted against reconsidering indefinite postponement by a vote of 48—38.

COSTS OF ADMINISTERING WORKMEN'S COMPENSATION ACT

62, A. Mr. Vaughan, Wisconsin Rapids, Progressive. This measure was introduced on January 30 and provided in effect that after July 1, 1935, the cost of administering the compensation law should be paid by each insurance company writing such business in Wisconsin. The amount to be contributed by each such company would be determined as one and one-half per cent of its indemnity, medical and compensation losses. The Assembly Committee on Judiciary reported the measure without recommendation and in April the Joint Committee on Finance recommended passage. On June 27, the measure was indefinitely postponed without a roll call.

246, S. Joint Committee on Finance. This bill is similar to bill 62, A., providing that the expense of administration of the workmen's compensation act would be assessed against the insurance carriers and uninsured employers. The measure was indefinitely postponed on May 27.

ADMISSION TO PUBLIC HOSPITALS FOR INSANE

913, A. Committee on Insurance and Banking. This bill proposed to amend that section of the present law which pertains to admission to public hospitals for the insane in the discretion of the superintendent thereof. If the bill were enacted into law, such discretion would be exercised by the county judge. Other changes of lesser importance were advanced by the measure.

The bill was referred to the committee on Public Welfare in the Assembly for a hearing which recommended indefinite postponement on May 22. By a viva-voce vote the Assembly followed the recommendation of the committee on May 24.

TRUSTEES FOR STATE INSTITUTIONS

912, A. Committee on Municipalities. This bill proposed the creation of two new sections to the statutes so as to provide that, in each congressional district of the state in which there is located one or more state institutions under the supervision of the state board of control, a board of trustees of state institutions should be appointed by the Governor with the consent of the Senate. The board of trustees would consist of three individuals, hired for a term of three years, whose duties would be to assist the state board of control in the direction and supervision of the state institutions within its district. No compensation would be received by such trustees, but they would be reimbursed for their expenses.

This measure was introduced on May 7 and referred to the committee on State Affairs for hearing. On June 14, this committee recommended that the bill be indefinitely postponed, and the measure was killed on June 25 by a viva-voce vote.

TAXATION OF INTOXICATING LIQUOR

808, A. Mr. O'Malley, Milwaukee, Democrat. This bill proposed amendments to chapter 139 of the statutes affecting the taxation of intoxicating liquor and of alcohol. No change was suggested as to the

provision of the law excepting alcohol used for hospital purposes from the tax, but the measure was important in that an amendment might be introduced at any time making a change which would be unfavorable to the present position of hospitals. However, the measure did not receive the approval of the Assembly, being indefinitely postponed 62—21 on May 27, 1935.

TAXATION OF PROPERTY OWNED BY SCIENTIFIC SOCIETIES

755, A. Committee on Judiciary. This bill proposed to create a new section of the statutes providing that property exempt from taxation under that section of the statute specifically granting such exemption to religious, charitable or educational organization, shall be exempt from taxation only to the extent of the interest owned by such organization or association.

In view of the enactment of bill 339, S., which extends the exemption statute to include scientific societies, this bill was of particular interest.

The measure was recommended for indefinite postponement by the committee on Taxation and, although re-referred to the same committee for a further hearing, the same recommendation followed on June 5, and on June 7 the Assembly indefinitely postponed the measure by a viva-voce vote.

On June 27, the Assembly killed bill 881, A., to the same effect.

ADMINISTRATION OF WORKMEN'S COMPENSATION LAW TO CIRCUIT COURTS

787, A. Committee on Judiciary. This bill proposed to take the jurisdiction as to making findings of fact and conclusions of law in workmen's compensation cases away from the Industrial Commission and placing the same in the circuit courts and in the county courts or any other court of record having jurisdiction of matters involving five thousand dollars or more.

The importance of this bill lay in any possible amendments which would affect the present sections of the statutes pertaining to medical evidence, witness fees, etc. However, the measure did not meet the approval of the Assembly committee on Labor or the Assembly, and was indefinitely postponed on May 22.

UNEMPLOYMENT COMPENSATION ACT

311, A. Mr. R. W. Peterson, Berlin, Republican. This bill provided for exemption of the canning industry from the unemployment compensation law. It was of interest to the medical profession only in the fact that it was the first endeavor to secure exemptions for various groups from the effect of the law. Amendments might be of great importance.

The measure passed both houses, but was vetoed by the Governor on the grounds that the unemployment law already contains adequate recognition of seasonal enterprises, and on the further ground that measures which would be introduced at a later date would make changes beneficiary to these seasonal industries.

A similar measure was introduced in the Senate but was withdrawn after 311, A., was vetoed.

COUNTY DEPARTMENTS OF HEALTH

159, S. Committee on Education and Public Welfare. This bill proposed to permit municipalities having a full time health officer and those having a part time health officer to retain such officer even though a county department of health is set up. In the case of such municipalities having a full time health officer, those municipalities could elect to stay out of the jurisdiction of the county department.

The bill was recommended for passage but was finally indefinitely postponed by the senate on July 12.

EMPLOYMENT OF AGENCIES FOR SOCIAL WELFARE

244, S. Senator Kannenberg, Wausau, Progressive. This bill would empower the employment of agencies for social welfare and the protection of children by the County Board. Substitute amendment 1, S., would limit the money payable to such agencies to $50.00 per year for each child exclusive of board and incidentals. Substitute amendment 1, A., would permit the employment of a child welfare agency under the statutes.

Substitute amendment 1, S., was adopted in the Senate and the measure passed the house. In the Assembly, substitute amendment 1, A., was adopted and then the bill was non-concurred in by a vote of 52—30.

COMPARATIVE NEGLIGENCE

143, S. Senator Severson, Iola, Progressive. The bill proposed to the doctrine of assumption of risks within the provision of the comparative negligence act relating to contributory negligence. This bill would apparently not impose a greater burden upon the physician and surgeon than that already contained within the provisions of the present law.

However, it has been necessary to watch the bill carefully. On April 24, substitute amendment 1, S., was offered by Senator Severson and on July 11, the Senate indefinitely postponed the bill after adopting substitute amendment 1, S., by a vote of 16—13 with four members paired.

STERILIZATION

632, A. Committee on Public Welfare. This measure was introduced by the committee on Public Welfare, providing regulations under which the State Board of Control could provide for the sterilization of feeble-minded, epileptic, etc. The measure was voted upon on several separate occasions, but was indefinitely postponed by a vote of 45—42.

376, S. Senator Groves, Committee on Education and Public Welfare. This measure related to the sterilization of persons in institutions.

Similar to bill 682, A., introduced in the Assembly, it was indefinitely postponed by a vote of 21—6 on July 11.

STATE AUTOMOBILE INSURANCE

321, S. Senator Severson, Iola, Progressive. This bill provided for state automobile insurance fund.

It was killed on July 11 in the Senate by a vote of 21—8.

INSTITUTE FOR CRIPPLED CHILDREN

656, A. Committee on Education. This measure was introduced April 8, and in its original form would have empowered the county board to appropriate money for the aid and education of crippled children. Substitute amendment 1, A., was offered by Mr. Kiefer on April 30 which greatly enlarged the purpose of the original bill and provided for the maintenance of an institute to be built by the state board of control and to be known as the institute for crippled children.

The substitute amendment died in committee and the measure passed the Assembly and the Senate committee on State and Local Government recommended non-concurrence. The Senate killed the bill on July 19.

COSMETIC ART

292, A. Mrs. Kryszak, Milwaukee, Democrat. This measure proposes changes in the regulations governing the practice of cosmetic art, including the requirements now in effect relative to the qualifications of applicants for managers' licenses, operators' licenses, etc. The committee on Public Welfare recommended indefinite postponement and the measure was sent to hte committe on Finance. The Assembly, after first advancing the measure, reversed itself killing the bill on August 8.

The measure was of interest to the medical profession in its public welfare aspects, and while the profession made no appearance on the bill, it watched the measure in order to insure that no amendments were presented inimical to the public health.

COMPULSORY AUTO INSURANCE

383, A. Messrs. Sigman and Olson. Two Rivers and Ashland, Progressives. This bill is identical with bill 176, S., sponsored by Senator Severson, providing for compulsory automobile insurance. On July 12, the Assembly committee on Judiciary recommended indefinite postponement. The Assembly killed the bill 59—24.

PROFESSIONAL EQUIPMENT EXEMPT FROM EXECUTION

822, A. Committee on Judiciary. This bill was introduced April 30 and proposed, in one part, to exempt the professional equipment of any physician, surgeon, dentist, etc., used or kept for the purpose of carrying on his profession not exceeding $400 in value; the office furniture used or kept for the purpose of carrying on his profession not exceeding $100 in value; together with certain percentages of earnings.

The committee on Judiciary which conducted a hearing on the bill recommended passage and the measure was advanced and then passed by the Assembly without a roll call. On June 17, it was received by the Senate which referred the measure to the committee on Judiciary. The bill was killed by the Senate on August 8.

MINIMUM WAGES

132, A. Mr. Genzmer, Mayville, Democrat. The measure proposed new sections to the statutes providing minimum wages for employes in stores, offices, departments, establishments or utilities. The applicability to hospitals is doubtful, but it would seem that the measure would certainly include professional offices or physicians. The Assembly killed the bill August 8, 64 to 27.

PHARMACISTS

401, A. Mr. Grobschmidt, Milwaukee, Progressive. This bill proposed certain changes in the present law relative to pharmacists; also would make the requirement that a community containing less than 500 would eventually be permitted only registered pharmacists, thus eliminating the assistants.

The bill was reported by the Assembly committee on Public Welfare without recommendation and on June 25 was laid upon the tabie. On July 25 the bill was withdrawn.

INSTITUTE FOR PARALYTIC CHILDREN

991, A. Joint Committee on Finance. This bill provides for the creation of an institute for paralytic children under the direction of the State Board of Control. The measure was heard by the committee on Public Welfare and was subsequently killed in the Assembly on August 9.

ABOLISHMENT OF LOCAL DEPARTMENTS OF HEALTH

879, A. Committee on Public Welfare. This bill, introduced on May 3, proposed changes in the present law which requires abolishment of local departments of health (with certain exceptions) whenever a county board provides for a county department of health. This measure would so change the law as to make it discretionary whether such local boards of health shall be abolished.

The bill was killed in the Assembly.

4. Measures Now Laws

MEDICAL GRIEVANCE COMMITTEE

267, A. Mr. Groves, Lodi, Progressive, at request of State Medical Society of Wisconsin. This meas-

ure provided for the creation of a State Medical Grievance Committee consisting of the state health officer, secretary of the Board of Medical Examiners, and the attorney general or deputy attorney general. The committee is empowerd "To investigate, hear and act upon practices by persons licensed to practice medicine and surgery under section 147.17 that are inimical to the public health."

Various attempts were made in the Assembly to amend the measure so as to include other professions, but such attempts produced no results. The measure was passed in the Assembly by a vote of 85—0, and in the Senate was passed without a roll call. The measure was signed by the Governor on May 14 and was published on May 16, as Chapter 70, Laws of Wisconsin, 1935.

STATE MEDICAL SOCIETY ENABLING ACT

733, A. Mr. Olson, Ashland, Progressive. This measure was introduced on April 17 at the request of the State Medical Society and proposes to amend chapter 148 of the statutes to enable the medical societies to enter into contracts with counties for the care of the indigent and low income groups. The bill specifically provides that free choice of physicians and the relationship of individual physician to patient shall not be destroyed by the virtue of any such contract.

Numerous attempts were made to amend the measure so as to include other groups, but all such amendments were held not germane on the grounds that the bill proposes to amend only chapter 148 pertaining only to the State Medical Society. By a vote of 45—43, the Assembly refused to indefinitely postpone the bill on June 6, and on June 24 passed the measure by a viva-voce vote.

The bill was heard by the senate Committee on Education and public Welfare which recommended to the Senate that the measure be concurred in. An effort by optometrists to amend the bill was unsuccessful and the bill passed in its original form.

NARCOTIC DRUG ACT

262, A. Committee on Judiciary. This 26-page bill proposed to put into effect in Wisconsin the uniform narcotic drug act as proposed by the Commissioners on Uniform Law. The State Medical Society sponsored certain changes and definitions so as to make certain that the provisions extended by the act would be confined to physicians licensed under the provisions of section 147.17 and not to unqualified groups. The amendment met with approval by the Assembly and the measure was passed by both houses. A long analysis of this bill will appear in a subsequent issue of the Journal.

VACCINATION

257, A. Mrs. Kryszak, Milwaukee, Democrat. This measure extended the present smallpox vaccination law to include non-residents coming into a municipality to attend school and included as well the privilege of extending gratuitous vaccination to such individuals.

The bill met with approval of both houses of the legislature and was signed by the Governor as chapter 98, Laws of 1935, on May 23.

BLOOD TESTS

758, A. Committee on Insurance and Banking. This measure, introduced by request, proposes to permit introduction as evidence in illegitimacy and paternity issues the results of blood tests. The bill prescribes that such test shall be made by duly qualified physicians or other duly qualified persons, not exceeding three to be appointed by the court and paid by the county. The measure was engrossed on July 3 and received final approval of the Assembly. In the Senate the measure was referred to the Committee on Judiciary where it received a favorable recommendation. The Senate passed the bill and it was signed by the Governor when it reached him.

ADMISSION OF PATIENTS TO COUNTY ASYLUMS

848, A. Committee on Labor. This measure relates to the admission of patients to county asylums, authorizing the judge of any court of record to commit inebriates or drug addicts to such asylums.

The Assembly passed the bill by a vote of 84—2 and the measure was passed in the Senate. The Governor signed the measure and the law became effective on August 12, 1935.

INMATES OF STATE AND COUNTY INSTITUTIONS

511, A. Committee on Finance. This bill made changes in the law relative to liability and collection for maintenance of inmates for state and county institutions. The bill requires the State Board of Control to prepare statements of amounts due from the county to the state, itemized as to board, clothing, dental, burial, surgical and transfer items.

Both the Assembly and the Senate passed the bill and it was signed by the Governor on August 6.

CHIROPRACTIC LICENSES

422, A. By Mr. Busby, Milwaukee, Democrat. This measure was another chiropractic bill providing that the renewal of chiropractors' licenses should be $5.00 instead of $3.00, and that in order to secure such annual license renewal the applicant must show that he has attended at least one of the two-day educational programs conducted by the Wisconsin Chiropractors' Association.

The measure met with no opposition on the part of organized medicine, passed both houses, and was signed by the Governor as Chapter 157, Laws of 1935, June 18.

TYPHOID CARRIERS

414, A. Mr. Inman, Beloit, Republican. This bill proposed the creation of a new section of the statutes providing for the commitment and compensation of typhoid carriers if so determined to be by the board of health, and providing means for the treatment thereof.

The measure received the approval of both houses of the legislature and was signed by the Governor on July 5 and was published as Chapter 129, Laws of 1935.

STATE INSTITUTIONS

171, S. Senator Nelson, Maple, Republican. This measure provided for a special legislative committee to improve the administration of the state charitable and penal institutions, with such powers as are ordinarily granted legislative committees. It was passed in the Senate and in the Assembly without a dissenting vote and was signed by the Governor on March 11, being published as Chapter 11, Laws of 1935, on March 14, 1935.

CHIROPODY

214, A. Mr. Murray, Milwaukee, Republican. This measure sponsored by the chiropodists, requires additional educational qualifications before applicants can be licensed in the practice of chiropody. The measure also made some changes in the present law respecting renewal of licenses and defined unprofessional conduct by which certificates of registration may be revoked.

The measure was passed by the Assembly by a vote of 92—2, and was concurred in by the Senate without a roll call. It was signed by the Governor April 25 and was published April 26 as Chapter 42, Laws of Wisconsin, 1935.

APPLICANTS FOR CIVIL SERVICE

105, A. Mr. Kroenke, Milwaukee, Democrat. This measure provided that no applicant for civil service positions could be certified without being a resident of the state for a period of two years prior to the application. Under the present law, an applicant need only be a resident of the United States and or this state. The measure had a long legislative history being amended some half dozen times. On July 8, it was enacted into law as chapter 223 and, as now worded, requires such examinations to be open to applicants who have been residents of this state for one year prior to their application. If, for professional and technical service, the commission may open the examinations to residents of other states under certain conditions.

DENTISTRY

296, A. Mr. Young, Milwaukee, Democrat. This measure is sponsored by the Wisconsin Dental Association providing a number of changes in the present law, administering the practice of that profession. Of chief interest are those provisions relative to advertising, unprofessional conduct, and licensing provisions.

The measure was approved by both houses of the legislature and was signed by the Governor June 5, as chapter 125, Laws of 1935.

TAXATION OF INTOXICATING LIQUORS

858, A. Committee on Excise and Fees. This bill proposed amendments to chapters 139 and 176, dealing with intoxicating liquors and the taxation of such liquors. No provision was contained in the measure which was detrimental to the interest of hospitals or to the medical profession, but it dealt with a subject which was open to amendment at any time and had to be carefully watched throughout its legislative history.

The measure was passed in both houses and was signed by the Governor as Chapter 217, Laws of 1935.

TAX EXEMPT PROPERTY OF SCIENTIFIC ORGANIZATIONS

339, S. Committee on Corporations and Taxation. This measure was introduced April 18, at the request of the Milwaukee Academy of Medicine and received the active support of the State Medical Society. The bill provided that the property of scientific societies would be tax exempt under the same provision as that by which the property of religious, charitable, and educational institutions is now tax exempt.

The measure has passed both houses and received the approval of Governor La Follette on July 1, being signed as Chapter 208, Laws of 1935.

BIRTH RECORDS

171, A. Mrs. Kryszak, Milwaukee, Democrat. This measure provided that certificates of illegitimate births be kept in separate file by the registrar of vital statistics and shall be subject to public inspection only on court order, except where necessary for obtaining proof of heirship. The measure, passed in both houses, was signed by the Governor on April 25, and was published on April 26 as Chapter 41, Laws of Wisconsin, 1935.

MEDICINAL LIQUOR PERMITS

237, A. Mr. Young, Milwaukee, Democrat. This measure in its original form proposed certain changes in Chapter 176 and Chapter 139 dealing with intoxicating liquors and taxation thereof. The bill further provided that physicians and hospitals would be required to take out a permit to receive shipments of intoxicating liquor, such permits to be renewed annually at a cost of $10.00. The State Medical Society sponsored amendments which eliminated the fee requirement on the part of physicians and hospitals. These amendments received the approval of Robert K. Henry, State Treasurer, and of the Revenue Tax Division through its officials Mr. Pal-

mer and Mr. Alstad. The amendments were acceptable to both houses in the legislature and the bill was enacted into law as Chapter 187, on June 27.

HUNTING NEAR HOSPITALS

107, A. Mr. Busby, Milwaukee, Progressive. This measure proposed to amend the present law so as to change the area within which no hunting may be carried on to 1500 feet of any hospital or sanitarium from that now prescribed by law as one-half a mile.

The measure was passed by the Assembly in amended form to provide that no person should hunt within 1700 feet of any hospital or sanitarium, and while first non-concurred in by the Senate, it was subsequently passed and is now a law.

Malpractice In the Use or Non-Use of the X-Ray

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THE use of the x-ray in a physician's practice in modern times has become almost indispensable. In the hands of one who is unversed in its proper operation, or its improper and negligent use in the hands of one versed in its operation, it still is dangerous. Its advent has given rise to many malpractice cases, and the physician and surgeon has frequently been charged with negligence in its use or non-use. The *facts* in each case determine liability. The rules of law seldom vary. It is in the application of the law to the facts that we find our greatest concern. It should be remembered that the negligence of a physician and surgeon is based upon the opinion of members of his own profession. Opinions differ and for that reason it is difficult to lay down a hard and fast rule as to what constitutes malpractice in any given case. The standard in different localities varies. A doctor living in an isolated community should not and is not judged by the standards of New York, Chicago, and other like cities,—and so in determining malpractice, the rule is that a physician or surgeon is required to use only that degree of care, diligence, judgment and skill which is exercised by other physicians of good standing of the same school or system of practice in the same or similar localities under like or similar circumstances, having due regard to the advanced state of the medical profession at the time in question—*Nelson v. Harrington, 72 Wis. 591; Jaeger v. Stratton, 170 Wis. 579; Kuechler v. Volgmann, 180 Wis. 238.* Malpractice may consist in lack of skill or care in diagnosis as well as in treatment—*Kuechler v. Volgmann, 180 Wis. 238.*

In this paper we are concerned with the use or non-use of the x-ray. It has been held that a physician, operating an x-ray machine, is required to exercise such reasonable care and skill as is usually exercised by physicians in good standing in the profession under similar circumstances, having due regard to the advanced state of the medical or surgical science at the time of the treatment—*Rost v. Roberts, 180 Wis. 207; Kuehnemann v. Boyd, 193 Wis. 588; Nelson v. Newell, 195 Wis. 572.*

Of interest is the first case in this country in which was first enunciated the rule as to the care and skill required in the use of the x-ray. This case was decided in 1904, nine years after the discovery of the x-ray. The title of the case is *Henslin v. Wheaton, 91 Minn. 219, 97 N.W. 882.* There it appears that the plaintiff thought that he had inhaled a gold crown into his lungs, and was desirous of having it located and removed. Defendant, a physician, in his attempt to locate it, used the x-ray on numerous occasions but no trace of it could be found. About two weeks after the x-ray was last used, an "x-ray burn" appeared upon his back. An action was commenced to recover damages on the ground that defendant had been negligent in the application of the x-ray. A verdict for defendant was reversed because of erroneous rejection of certain of plaintiff's testimony. In its opinion, the Court first laid down the rule of the care required by saying, "The legal obligation of the physician to his patient where his conduct is questioned in an action of this character demands of him no more than the exercise of such reasonable care and skill as is

usually given by physicians and surgeons in good standing. The rule is one of ordinary care and prudence." The courts, since that time, have elaborated somewhat upon the rule, but the underlying and governing principle has remained the same.

If there are two accepted methods in the profession, which can be used in the treatment of the particular case, one of them being by the use of the x-ray, the fact that the physician did not use the x-ray method is not negligence; or, if there are two accepted methods as to the use of the x-ray, in the particular case, and the physician uses one of them, it is not negligence not to have used the other method; or, further, if there are two of such methods, only one of which the physician has knowledge of, and which is the method which he properly employs, his ignorance of the other is immaterial so long as his practice was right. Physicians are not compelled to choose at their peril between two accepted methods of treatment, and the statement of an expert, at the trial, that he would have treated the case in a different way from that used is immaterial. The physician cannot defend the use of a bad practice by stating that he was advised to do so by other doctors, but if the practice which was used was proper, then it matters not who induced him to pursue such practice. *DeBruine v. Voskuil, 168 Wis. 104; Kuehnemann v. Boyd, 193 Wis. 588.* Where the surgeon correctly ascertains the location and nature of the fracture of the femur, his failure to use the x-ray for that purpose is not negligence. *Wright v. Conway, (Wyo.) 241 P. 369.*

FAILURE TO USE

The failure to use the x-ray machine, or to procure an examination by x-ray of the patient, having undertaken to treat such patient, may be negligence upon the part of the physician. The standard of care, in that respect, is the same as in the use of the x-ray, the question being, "Did he exercise such reasonable care in determining whether or not to use the machine, as is usually exercised by physicians in good standing under similar circumstances?" The nature of the injury treated may be such that it would not be negligence not to use the x-ray in making a further intensive and extensive examination in the first instance. Subsequent events and complaints by the patient may so change the entire perspective, that if thereupon there is a failure to use the machine to discover the seat of the complaint, the physician may be held lacking in the care and skill required of him. Thus a patient may come to the physician complaining that a particle of some foreign substance is lodged in his eye. The physician makes an examination and concludes that there is nothing wrong with the eye. He does not use the x-ray in making this examination. The patient comes to him, subsequently, and at each time complains of pain in the eye. The patient finally goes to another physician, who, after using the x-ray, removes a particle of extraneous matter from the eye. In a case similar to that outlined, it was held that the physician used ordinary care in the first examination, but that the nature of the injury, together with the numerous complaints as the treatment was carried on, rendered the circumstances such that the failure to use the x-ray constituted a want of the care which was required of this defendant, the testimony of experts being to the effect that the x-ray should have been used under the facts as they developed—*Kosack v. Boyce, 185 Wis. 513.*

Where the use of the x-ray is the usual and customary method adopted by physicians in the vicinity to diagnose a fracture and to check the progress of the healing, in order to ascertain whether there is a proper union of the bones and to remedy the situation if there is not, the physician may be found to have been negligent in failure to use the x-ray to make a timely diagnosis of the fracture. Thus in *Schwartz v. Zellmer, 209 Wis. 583*, plaintiff was injured in an automobile accident. He went to defendant for treatment. Defendant had an x-ray and fluoroscope in his office. A dislocated wrist was found. On the day after the first treatment, defendant took an x-ray, disclosing no fracture. The next day plaintiff called defendant's attention to a scraping of the bones, but was told that the bone was not broken. He went back to work upon defendant's advice. Having trouble, plaintiff

came back to defendant. An x-ray was taken showing that the radius was fractured. An open reduction was performed. The union left the arm impaired. A verdict was directed for defendant. This was reversed upon the ground that, under the evidence, the jury was entitled to believe that good practice and a proper discharge of his obligation as a physician required a more frequent and timely use of the x-ray than was made by defendant.

Whether it is negligence not to have used the x-ray is a question which the jury must determine with the aid of expert testimony. It is not negligence if diagnosis can be made without it.—*Wells v. Ferry-Baker Lumber Co. 57 Wash. 658, 107 P. 869.*

In determining whether the physician or surgeon was negligent in omitting to use the x-ray, one of the first considerations is the availability of the machine. A physician may not be guilty of malpractice in failure to use the x-ray because of the locality or community in which he is practicing. The converse is also true. In *Trask v. Dunnigan, (Mo. App.) 299 S.W. 116,* a physician was held not to have been negligent in making an incorrect diagnosis without x-ray. He was located in a rural community, and such machines were not commonly available in such places. The distance to an available machine, and the emergency which exists for immediate treatment, are also material considerations. The physician's failure to use an x-ray, although his practice is such that he could profitably own and use such apparatus, for the preliminary examination and use during treatment, may be excused by his being located in a small community in which the suitable electrical current, required for the operation of the machine, is not available.

Not only must the patient prove that the physician was negligent in not using the x-ray, but he must show that had an x-ray picture been taken, the result complained of would not exist, or have existed. He must show that the injury complained of was a proximate result of the failure to use the machine. Many of the foregoing considerations are raised in *DeBruine v. Voskuil, 168 Wis. 104, 110,* where it is said, "Plaintiff's attorneys cite us to no case holding that it is as a matter of law negligence for an attending physician or surgeon to fail to avail himself of the use of an x-ray apparatus in the case of fracture, and upon the facts shown here we cannot so hold. . . . It does not appear at what stage of the healing period, if at all, an x-ray would have disclosed whether or not a callus was being formed, and we shall not now attempt to determine under what circumstances the failure of an attending physician and surgeon to use an x-ray in cases of fracture should be held to be evidence from which an inference of negligence or unskilful treatment may be drawn. It is clear that under the facts of this case the failure to procure an x-ray during the course of treatment did not amount to negligence or unskilful treatment."

PHYSICIAN'S DUTY

Where the proper facilities are available, and proper treatment requires an x-ray picture to be taken, it is the physician's duty to have such picture taken, without any request therefore by the patient. *James v. Grigsby, 114 Kan. 627, 220 Pac. 267.* On the other hand, if an x-ray photograph is required to determine whether a bone of the patient's body is broken, and he is informed by the attending physician that such photograph will have to be taken, the physician is not responsible for not discovering a bone which is in fact broken, and which was not discoverable by other approved methods, if the patient declined to have the picture taken. —*Carey v. Mercer, 239 Mass. 599, 132 N.E. 353.* An x-ray expert is not an insurer. He is bound to possess and use only the reasonable skill and ordinary care which is required of him. He is not liable for an honest mistake in judgment—*McCoy v. Buck, (Ind. App.) 157 N.E. 456,* a case in which a physician was held not liable for burns which somehow resulted from the treatment of eczema by the use of x-ray.

The more recent cases hold that the doctrine of res ipsa loquitur does not apply from the mere fact of unsatisfactory results from the use of the x-ray. Res ipsa loquitur means: "The thing speaks for itself." It is a doctrine which permits an inference

of negligence from the mere proof of an injury or accident where it appears that the injury or accident would not or could not have happened except for negligent conduct of the physician. *Rost vs. Roberts, 180 Wis. 207.*

The doctrine of res ipsa loquitur, strictly applied, is not applicable to malpractice cases between patient and physician. The circumstances must appear to have been such, considered with the injury, that the jury can draw therefrom, to a reasonable certainty, an inference of negligence. This rule is applied to x-ray treatments given by a physician to a patient for curative or healing purposes. Thus in *Kuehnemann v. Boyd, 193 Wis. 588,* it appeared that a physician, after treating a patient for goiter with x-ray, without causing burns and with good results, proceeded to hasten the cure by using only one filter instead of two in the x-ray machine. Plaintiff's contention was that the burns resulted from overdosage. Experts showed that such burns might result from hypersensitive skin. The trial court charged the jury that the fact of the burn might be considered as evidence of failure to use due care and skill. On appeal, this charge was held error, in that the doctrine of res ipsa loquitur was not applicable to these cases; that the defendant had sufficiently rebutted any inference of negligence by showing that the plaintiff's hypersensitive skin might have caused the burn; and that there was no evidence to establish the fact that there had been an overdosage. Absolute certainty that the injury resulted from negligence is not required in the law. In these cases, the rule requires proof which satisfies the mind of the jury to a reasonable certainty. Such proof was held to exist in *Nelson v. Newell, 195 Wis. 572,* in which it appeared that a physician using the x-ray machine to take pictures caused third degree burns on the patient's back. The testimony of experts tended to show that in thousands of cases no burns were known to result from the proper use of the x-ray. A plaintiff in a suit for negligence in taking an x-ray picture, which did not disclose a fracture, must show, with reasonable certainty, that the injury of which he now complains would not have resulted had a proper picture been made and proper treatment administered—*Mississippi Baptist Hospital v. Moore, (Miss.) 126 So. 465, 67 A.L.R. 1106.* The prevailing view with reference to the rule of res ipsa loquitur appears to be that that rule does not relieve the plaintiff of the burden of showing negligence.

DIVIDED RESPONSIBILITY

The evidence and testimony which is produced at the trial may show that the injury complained of is the result of two or more causes, for one of which only the defendant may have been responsible, it being left in doubt as to which one of these causes in fact was the responsible one. If the question of the negligence upon the part of the defendant, and his proximate responsibility for the injury, is left in the realm of speculation and conjecture, the plaintiff has not made out a case for the jury. Where the proof disclosed that a given result may have occurred by reason of more than one proximate cause, and a jury can do no more than guess or conjecture as to which was in fact the efficient cause, such a choice is not to be submitted to the jury, plaintiff, as a matter of law, not having, in such case, met the burden of proof that it was defendant's unskilful treatment which in fact caused the result—*Matuscka v. Murphy, 173 Wis. 484.* Thus in *Kuehnemann v. Boyd, 193 Wis. 588,* heretofore referred to, evidence that a treatment by a machine using two filters did not produce a burn, while a subsequent treatment with one filter removed did produce one, was held not to prove that the dosage with one filter removed was an overdosage, or that a treatment with two filters was a normal dosage but that it left entirely to speculation whether the burn was the result of an overdosage or whether it was due to the hypersensitiveness of the skin. A verdict based upon such evidence, in favor of the plaintiff, was set aside upon appeal.

As intimated in the foregoing paragraphs, the injury resulting from the use of the x-ray may have been due to the peculiar and unusual susceptibility of the patient. If such is proved to have been the case, the physician is not liable. The physician, however,

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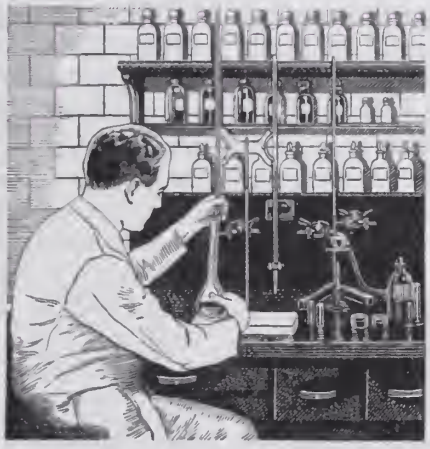

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must show that such peculiar susceptibility existed at the time of the treatment; it cannot be left to mere speculation that the patient was so possessed. In an action to recover for malpractice in negligently applying an x-ray in such manner as to produce a third-degree burn, a verdict of the jury, in favor of the plaintiff, cannot be set aside on a mere speculation that the plaintiff is one who has a hypersensitiveness to the x-ray—*Nelson v. Newell, 195 Wis. 572, 576.* That an x-ray burn may result from a hypersensitive skin cannot be diagnosed in advance, but evidence of earlier x-ray treatments, not having burned the patient, tends to prove that the burns in question were not due to hypersensitive skin. In *Rost v. Roberts, 180 Wis. 207,* the evidence disclosed that some persons are peculiarly susceptible to x-ray treatments; that unexpected results do sometimes ensue from such treatments; that the treatment administered was the usual and ordinary treatment for the affliction, pustular acne, from which a burn such as the plaintiff suffered was not likely to follow. It was held that if the jury believed the experts who so testified, they were warranted in inferring it was as probable that the burn resulted from peculiar susceptibility as from negligent treatment. Each case must rest upon its own facts, in the light of the evidence produced for the consideration of the jury. Unusual sensitiveness or peculiar susceptibility to x-ray cannot be determined by known methods. If the defendant had knowledge of the idiosyncrasy, meaning thereby that one person is more susceptible to a burn than some other patients under similar circumstances, a departure from normal, the question then is whether, having such knowledge, he used due care and diligence in the application which he made. Should an x-ray burn result, he cannot then rely upon an inference that the hypersensitiveness of the skin was a cause of the result. A physician is justified in relying upon the judgment of another reputable physician who sends a patient to him for an x-ray examination, there being nothing to show that the patient's condition was such as to render her peculiarly liable to injury from x-ray exposure—*Sweeney v. Erving, 35 App. (D. C.) 57, 43 L. R. A. (n. s.) 734, affirmed, 228 U. S. 233, 33 S. Ct. 415, 57 L. ed. 815.*

The doctrine of respondeat superior is not applicable where a physician employs another physician to take an x-ray picture—*Gross v. Robinson, 203 Mo. App. 118, 218 S. W. 924.* In such cases the physician so employed is an independent contractor, that is, one who is employed to perform a certain act for another, usually for compensation, but who is not under the direction and control of the latter as to the general details encountered in the performance of the act. Under this doctrine, a trained x-ray operator, though not a physician, is within the rule that a physician, who calls in another physician, specially, to assist him, is not liable for the negligence of the latter—*Runyan v. Goodrum, (Ark.) 228 S. W. 397.* If, however, the physician calls in an x-ray operator who is incompetent, and so known to the physician, or who could have been so known to the physician by the use of ordinary care, then the doctor may be held liable for the consequences of the negligence of the operator in that the doctor in such case is negligent himself.

A physician, without an x-ray apparatus, may bring his patient to a hospital maintaining an x-ray machine, and employing its own operator. As a result of the negligence of the operator, the patient may receive an injury, and the doctor may, under the circumstances existing, be held responsible for the consequences of such negligence. In such cases the hospital may be held liable over to the physician for the negligence of its employee. The rule is the same, though the hospital be a charitable institution, as the nonliability of a charitable hospital for the negligence of its servants is held to extend only to inmates of the hospital—*Marble v. Nicholas Senn Hospital, 102 Nev. 343, 167 N. W. 208.* In the management of the x-ray department of the hospital, ordinary care is required to see that it is equipped with approved apparatus and competent specialists are provided for its proper operation—*Runyan v. Goodrum, 147 Ark. 481, 228 S. W. 397, 13 A. L. R. 1403.*

Where an employer insists upon taking an x-ray photograph to discover the nature of

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an injury to a servant, and the servant was burned during the application, the servant then bringing suit against the employer, the latter is liable upon the application of the rule of respondeat superior, since the doctor was employed by the defendant, and so was his servant, the relation of physician and patient not existing between the doctor and the plaintiff at the time—*Jones v. Tri-State Telephone & Telegraph Co. 118 Minn. 217, 136 N. W. 741.* The doctor could have been held liable by the injured servant, had he chosen to bring suit against him. The recourse of the employer, in such case, is against the doctor for indemnity.

CRIMINAL LIABILITY

Criminal liability, as well as civil liability, may result from the improper use of the x-ray. The x-ray machine, operated by a competent expert, is of inestimable value to mankind, but it may be an exceedingly dangerous agency if improperly used. In the hands of one not sufficiently advised as to the proper manipulation of the machine, or in the hands of one who negligently uses it so as to cause untold suffering and death, the consequences of its improper use or application may entail criminal liability. In one case the death of a patient was caused by an x-ray burn resulting from the negligent use of an x-ray machine. The court sustained an indictment for manslaughter,—*State v. Lester, 127 Minn. 282, 149 N. W. 297*—.

CONCLUSION

The x-ray, from the medical standpoint as well as others, is being more extensively used today than at any time since its discovery, and all indications point to a more extensive use thereof in the future. With an increase in the innumerable injuries which are the result of the operation of the automobile and other vehicles, the increasing number of industrial casualties, and the advancing stage of the medical science, what may be proper practice today in the use or non-use of the x-ray, may be improper practice at some future date. The x-ray is, and will be, used in connection with all classes of injuries. The apparatus has been so improved, and the operators thereof, on the whole, so versed in the proper operation of the machines, that it now has acquired a remarkable degree of efficiency and reliability. The standard of care in its use or non-use will remain the same. That standard will always require, unless special legislation intercedes and changes the rule, that a physician who operates an x-ray machine must exercise, and need only exercise, such a degree of care, diligence, judgment, and skill as physicians in good standing in the same school of medicine usually exercise in the same or similar localities under like circumstances, having regard to the advanced state of the medical and surgical science at the time of the treatment. By the use of such care, and by adherence to that rule, the physician discharges his legal duty to the patient.

One Hundred and Fourteen Licensed by State Board

ONE hundred and fourteen physicians have just been licensed in Wisconsin as result of the late June meeting of the State Board of Medical Examiners. Of the total licensed, ninety-four were licensed as result of examination and twenty by reciprocity with other states. The names of the licentiates follow:

LICENSED BY EXAMINATION

Name	*School of Graduation*	*Year*	*Present Address*
Allin, Robin N.	Wisconsin Medical	1934	Wis. Gen. Hospital, Madison, Wisconsin
Baker, Henry K.	Northwestern	1934	2675 N. Summit Ave., Milwaukee, Wis.
Bell, John M.	Wisconsin	1935	Milw. Co. Hospital, Wauwatosa, Wis.
Biehn, Ralph H.	Marquette	1935	Milw. Co. Hospital, Wauwatosa, Wis.
Boersma, John	Rush	1934	Sheboygan Mem. Hosp., Sheboygan, Wis.
Boyer, Helen N.	Tuft's	1933	Wis. Gen. Hospital, Madison, Wis.
Broderick, Clifford F.	Marquette	1935	1829 N. 54th St., Milwaukee, Wis.
Budny, Clement L.	Marquette	1935	2327 W. Mitchell St., Milwaukee, Wis.

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Caputo, Joseph M.	Marquette	1935	Milw. Co. Hospital, Wauwatosa, Wis.
Cash, Isadore I.	Wisconsin	1934	3427 W. Nat'l. Ave., Milwaukee, Wis.
Christiansen, Wilmer H.	Marquette	1935	4326 N. Ardmore Ave., Milwaukee, Wis.
Cohen, Ben David	Wisconsin	1934	2920 N. 18th St., Milwaukee, Wis.
Curreri, Anthony R.	Wisconsin	1934	Columbia Hospital, Milwaukee, Wisconsin
Daniels, Einar R.	Wisconsin	1934	Wis. Gen. Hospital, Madison, Wisconsin.
Dean, Frank K.	Northwestern	1934	636 E. Gorham St., Milwaukee, Wis.
Dewane, Francis J.	Marquette	1935	911 N. 14th St., Milwaukee, Wis.
Dricken, Hilbert N.	Marquette	1935	Milw. Co. Hospital, Wauwatosa, Wis.
Fabric, Ben Lue	Marquette	1935	2101 N. 14th St., Milwaukee, Wis.
Fabry, Eleanora G.	Marquette	1935	3030 W. Arthur Ave., Milwaukee, Wis.
Farrell, Thomas F.	Pennsylvania	1934	Seneca. Wis.
Feldt, Rob't. H.	Northwestern	1934	1930 Prospect Ave., Milwaukee, Wis.
Fischer, Frank J.	Wisconsin	1934	St. John's Hosp., Cleveland, Ohio
Foss, Edward L.	Wisconsin	1934	111 South St., Oconomowoc, Wis.
Fox, Paul Fabian	Loyola	1934	Cook Co. Hospital, Chicago, Ill.
Franklin, Emil	Marquette	1935	1136 N. 45th St., Milwaukee, Wis.
Furlong, Joseph J.	Marquette	1935	547 N. 64th St., Milwaukee, Wis.
Garrison, Rogers E.	Northwestern	1934	1261 3rd St. So., Wisconsin Rapids, Wis.
Garrity, Richard Wm.	Wisconsin	1934	Marshfield Clinic, Marshfield, Wis.
Gilbert, Ralph H.	Wisconsin	1934	2250 Hollister Ave., Madison, Wis.
Grota, Hubert D.	Marquette	1935	Sister Bay, Wis.
Guardalebene, Vito	Minnesota	1934	522 E. Detroit St., Milwaukee, Wis.
Heinan, Frederick C.	Marquette	1935	1817 E. Rusk Ave., Milwaukee, Wis.
Hilger, Wm. A.	Marquette	1935	1744 N. 34th St., Milwaukee, Wis.
Hofmeister, Fred'k. J.	Marquette	1935	2049 N. 34th St., Milwaukee, Wis.
Housner, Richard E.	Marquette	1935	Cazenovia, Wis.
Jaeschke, Walter H.	Wisconsin	1934	Wis. Gen. Hospital, Madison, Wis.
James, Harriet D.	Minnesota	1934	Two Harbors, Minn.
Jennings, John L. Jr.	Virginia	1934	Wis. Gen. Hospital, Madison, Wis.
Joachim, Fred'k. G.	Wisconsin	1934	1619 Monroe St., Madison, Wis.
Jochimsen, Marvin A.	Marquette	1935	1475 S. 84th St., West Allis, Wis.
Johnson, Paul A.	Minnesota	1935	Grantsburg, Wis.
Katz, Alex M.	Wisconsin	1934	2817 W. McKinley, Milwaukee, Wis.
Kaufman, Lawrence W.	Wisconsin	1934	2358 N. 17th St., Milwaukee, Wis.
Kauth, Charles P.	Marquette	1935	Milw. Co. Hospital, Wauwatosa, Wis.
Keenan, Lawrence J.	Marquette	1935	267 Gillett St., Fond du Lac, Wis.
Kehlnhofer, Francis J.	Marquette	1935	1042 S. 26th St., Milwaukee, Wis.
Kelly, James D. A.	Marquette	1935	7503 Kenilworth, Wauwatosa, Wis.
Kingbury, Lawrence H.	Louisville	1934	Waverly Hills San., Waverly Hills, Ky.
Klieger, Samuel	Marquette	1935	2861 N. 9th St., Milwaukee, Wis.
Knauf, John A.	Marquette	1935	Chilton, Wisconsin
Konz, Stephan A. Jr.	Marquette	1935	606 N. Oneida, Appleton, Wisconsin
Kroyer, Theodore J.	Wisconsin	1934	1308 E. Dayton, Madison, Wis.
Lappley, Walter F.	Wisconsin	1934	1303 W. Johnson, Madison, Wis.
Lipkin, Samuel J.	Wisconsin	1934	700 W. Garfield Ave., Milwaukee, Wis.
Malec, John Peter	Wisconsin	1934	404 W. Washington Ave., Madison, Wis.
Mason, Rob't. W.	Wisconsin	1934	Milw. Co. Hospital, Wauwatosa, Wis.
McCormack, Myron T.	Marquette	1935	St. Mary's Hospital, Milwaukee, Wis.
Megna, Jerome A.	Rush	1934	Tampa Munic. Hospital, Tampa, Florida
Midelfart, Peter A. H.	Harvard	1931	Wis. Gen. Hospital, Madison, Wis.
Mills, Charles S.	Wisconsin	1934	Univ. Hospital, Ann Arbor, Mich.
Musser, Marc J. Jr.	Wisconsin	1934	Wis. Gen. Hospital, Madison, Wis.
Niebauer, Henry J.	Wisconsin	1934	Univ. Hospital, Iowa City, Iowa
O'Leary, Wm. J.	Marquette	1935	1217 Milwaukee Ave., So. Milwaukee, Wis.
Parks, John L.	Wisconsin	1934	Wis. Gen. Hospital, Madison, Wis.
Paulson, Walter O.	Wisconsin	1934	1218 1st Ave. So., Apt. 302, Minneapolis, Minn.
Rastetter, Joseph W.	Northwestern	1935	Milw. Co. Hospital, Wauwatosa, Wisconsin
Rogers, Albert F.	Rush	1935	825 N. 33rd St., Milwaukee, Wis.
Sazama, Frank B.	Rush	1934	Chippewa Falls, Wis.
Schelble, John P.	Marquette	1935	4142 N. Murray Ave., Milwaukee, Wis.
Schmidt, Elmer A.	Marquette	1935	4332 N. Morris Blvd., Milwaukee, Wis.
Schneider, Harold O.	Wisconsin	1934	2214 14th St., Monroe, Wisconsin
Schroeder, Claude F.	Wisconsin	1934	Two Rivers, Wis.
Shinners, George M.	Marquette	1934	1012 S. Broadway, DePere, Wis.
Simonson, Lloyd M.	Wisconsin	1933	Wis. Gen. Hospital, Madison, Wis.
Smith, Ernest V. Jr.	Northwestern	1934	25 N. Park Ave., Fond du Lac, Wis.
Smits, Raymond H.	Marquette	1935	1632 Chicago Ave., Evanston, Ill.
Sobush, Leon D.	Marquette	1935	2504 Sheridan Pl., Manitowoc, Wis.
Stahmer, Albert H.	Marquette	1935	Milw. Co. Hospital, Wauwatosa, Wis.
Steiner, Clarence M.	Marquette	1935	1725 W. Center St., Milwaukee, Wis.
Stern, Ruth Schoenkerman	Marquette	1935	7408 W. Washington, West Allis, Wis.
Stone, Berenice I.	Wisconsin	1934	Hurley Hospital, Flint, Michigan
Sverdlin, Abe A.	Marquette	1935	2409 W. Lloyd St., Milwaukee, Wis.
Theisen, Stephan A.	Marquette	1935	1724 Yout St., Racine, Wisconsin
Toenhart, Otto E.	Harvard	1934	734 N. 26th, Milwaukee Wisconsin
Torigoe, Masamichi	Loyola	1934	185 Hazel St., Oshkosh, Wis.

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Weisfeldt, Louis A.	Rush	1934	908 N. 12th St., Milwaukee, Wis.
Weiss, Andor A.	Rush	1934	908 N. 12th St., Milwaukee, Wis.
Wild, Joseph P.	Louisville	1934	2416 N. 21st St., Milwaukee, Wis.
Wirthwein, Carlton	Marquette	1935	6222 W. North Ave., Milwaukee, Wis.
Wolf, Herman	Wisconsin	1934	6053 37th Ave., Kenosha, Wis.
Yost, Raymond Geo.	Marquette	1935	185 E. Irving St., Oshkosh, Wis.
Zubatsky, David J.	Rush	1933	2478 N. 47th St., Milwaukee, Wis.

LICENSED BY RECIPROCITY

Name	*School of Graduation*	*Reciprocating From*	*Present Address*
Bleyer, Saumel A.	Washington Univ.	Missouri	817 Univ. Club Bldg., St. Louis, Missouri
Brown, C. Baxter	Rush	Illinois	202 N. Underhill, Peoria, Illinois
Buckley, Clarence H.	Minnesota	Minnesota	1925 Broadway, Menomonie, Wis.
Dub, Leonard M.	Cincinnati	Ohio	The Spa, Waukesha, Wis.
Gloss, Albert J.	Loyola	Illinois	601 W. College Ave., Appleton, Wis.
Green, James T. Jr.	Virginia	Virginia	Wis. Gen. Hospital, Madison, Wis.
Holley, Chesterfield J.	Jefferson	Ohio	Box 898, Bridgeport, Ohio
Hletko, Paul	Loyola	Illinois	1762 W. 62nd Pl., Argyo, Ill.
Jerome, Jerome T.	Michigan	Michigan	Jackson Clinic, Madison, Wis.
Overton, James B. Jr.	Washington Univ.	Missouri	Dept. of Justice, Medical Center, Springfield, Mo.
Phillips, Alex H.	Illinois	Illinois	Marshfield Clinic, Marshfield, Wis.
Pleune, Russell E.	Rush	Illinois	1374 Seward Ave., Detroit, Mich.
Rawlins, Joseph A.	Northwestern	Illinois	Portage, Wisconsin
Sass, Lawrence C.	Creighton	Nebraska	1845 N. 4th St., Milwaukee, Wis.
Scherping, Walter H.	Northwestern	Illinois	Commercial Bldg., Manitowoc, Wis.
Seward, Lynn J.	Univ. of Rochester	Maryland	Lake Mills, Wis.
Smith-Petersen, Marius N.	Wisconsin	Mass.	La Crosse, Wis.
Szopinski, Aloysius	College of P & S. Ill.	Illinois	4201 S. Mozart St., Chicago, Ill.
Thurston, Eric W.	St. Louis Univ.	Missouri	St. Francis Hosp., La Crosse, Wis.
Zeller, Michael, Jr.	Northwestern	Illinois	4753 Broadway, Chicago, Ill.

THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

The Doctor and the Public. By James Peter Warbasse, M.D., Author of "Surgical Treatment," "The Conquest of Disease," "Medical Sociology," "Cooperative Democracy," etc. Illustrated. Paul B. Hoeber, Inc., New York, N. Y. Price $5.00.

The American Illustrated Medical Dictionary. Seventeenth Edition. Plain $7.00 net; Thumb Index $7.50 net. W. B. Saunders Co., Philadelphia.

New and Nonofficial Remedies, 1935. American Medical Association, 535 N. Dearborn St., Chicago. (We have a review for this book).

A.M.A. Council on Pharmacy and Chemistry Reports 1934. American Medical Association, 535 N. Dearborn St., Chicago, Ill.

Living Along With Heart Disease. By Louis Levin, M.D., cardiologist to the St. Francis Hospital and New Jersey State Prison Hospital, Trenton, N. J. Price $1.50. The Macmillan Co., 60 Fifth Ave., New York, N. Y.

The Physiology of Physical Education. By Percy M. Dawson, M.D., formerly associate professor at the Johns Hopkins University and at the University of Wisconsin. The Williams & Wilkins Co., Baltimore, Md. Price $8.00.

The Principles and Practice of Medicine. Originally written by the late Sir William Osler, BT., M.D., F.R.S. Twelfth edition; revision by Thomas McCrae, M.D., Fellow of the Royal College of Physicians, London; professor of medicine, Jefferson Medical College, Philadelphia. D. Appleton-Century Co., New York, N.Y.

A Textbook of Clinical Neurology. By Israel S. Wechsler, M.D., professor of clinical neurology, Columbia University, New York; attending neurologist, Neurological Institute and The Montefiore Hospital, New York. Third Edition, reset. Cloth $7.00 net. W. B. Saunders Co., Philadelphia, Pa.

The International Medical Annual. Price $6.00. William Wood and Company, Baltimore, Md.

Objective and Experimental Psychiatry. By D. Ewen Cameron, M.B., Ch.B., physician in charge, reception service, Provincial Mental Hospital, Brandon, Man.; formerly assistant physician, Glasgow Royal Mental Hospital; assistant resident psychiatrist, Johns Hopkins Hospital. The Macmillan Company, New York.

1,000 Questions and Answers on T. B. By Fred H. Heise, M.D., Medical Director, Trudeau Sanatorium and Question Box Editor of Journal of the Outdoor Life. Journal of the Outdoor Life, 50 West 50th St., New York, N.Y.

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graphically the genetic and structural relationships of the various substances in question, to others of biological interest. Wherever possible, graphic presentations are used and this is especially true of situations involving the physical, chemical viewpoint. The book is neither a textbook of physiology nor of clinical biochemistry, but at every point close and intimate connections are made with the normal and abnormal physiology of man. Thus, for instance, there are highly suggestive chapters on the biochemistry of bacteria and immunochemistry.

The old or young student of chemistry in biology or in medicine, who can afford to possess only four modern books in this field should, select this volume as one of the quartet. E. J. W.

The Principles and Practice of Urology. By Frank Hinman, A. B., Leland Stanford Junior University; M. D., Johns Hopkins Medical School. Price $10.00 net. W. B. Saunders Co., Philadelphia.

This recent treatise on urology deserves a place in every urologist's library because of its merits as a reference book rather than as a general textbook.

It has been prepared by an outstanding urologist. An important inclusion is the section on recent studies of hormonal manifestations of tumors of the testicle. Treatment of urinary tract infections with ketogenic diet is also discussed. J. B. W.

Modern Motherhood. By Claude E. Heaton, M. D. Price $2.00. Farrar & Rinehart, Inc., New York, N. Y.

Several books have been published in relation to the education of lay readers and expectant mothers. I feel that it is not a question of underestimating the intelligence of a large body of readers, but it is the question of these readers being able to properly evaluate and qualify medical information. There are a good many things in this edition which should be qualified, and I point particularly to the chapter on anesthesia and analgesia. I also feel that this volume is too much in detail to produce the effect that the author has intended. R. E. C.

Clinical Laboratory Methods and Diagnosis. By R. B. H. Gradwohl, M. D., director of the Gradwohl Laboratories. Price $7.50. C. V. Mosby Company, St. Louis, Mo.

The author has collected in this book technical laboratory procedures from many fields of science which are applicable to clinical medicine. The usual text or reference book on clinical laboratory methods has up until a few years ago been a compilation of tests for the examination of urine and the cytology of blood. It is true that brief mention has been made of gastric analysis, microscopy of sputum, etc., but for the most part the medical sciences have been brushed over rather lightly. This book is a volume of almost one thousand pages and is encyclopedic in the range of subjects discussed and technics described. In addition to the usual subjects there are chapters on postmortem examinations, tissue cutting, preparation of museum specimens and toxicological technic. Information on many of these subjects has to be sought for in special volumes, which are sometimes not readily available. Because it can be used as a reference on so many different subjects, it will be found to be useful in every laboratory and in the office of every physician who has to rely upon his own facilities for clinical laboratory methods.

In such a comprehensive work we wish that the arrangement of material could have been different and in certain instances that the emphasis had been placed on the clinical features of the science being applied rather than on the technic of the tests. For example: analysis of urine is treated by describing a series of tests some of which have little clinical significance; kidney function tests are skipped over very briefly with the most space being given to the phenolsulphonphthalein test; and interpretations are discussed not by a consideration of the results of tests but under clinical names which are often anatomical. The clinical importance of this book could be magnified by approaching the description of technics for tests through a discussion of pathological physiology.

The section on hematology is very good but a little more extended than necessary. W. D. S.

A Text-Book of Clinical Neurology. By Israel S. Wechsler, M. D., professor of clinical neurology, Columbia University, New York; attending neurologist, Neurological Institute and The Montefiore Hospital, New York. Third edition, reset. Cloth, $7.00 net. W. B. Saunders Co., Philadelphia, Pa.

Wechsler's 3rd edition Text-book of Clinical Neurology brings up-to-date some of the more recent developments in neurology which were not fully covered in his previous editions. It presents the subject of neurology in a clear, concise way with sufficient brevity to make it an excellent text-book for students, and, although there are other books that are more comprehensive on this subject, the needs for the third and fourth year medical student are more than adequate. I shall continue to recommend it, and Grinker's Neurology, to our students. W. J. B.

The Nervous Patient. By Charles Phillips Emerson, M. D., research professor of medicine, Indiana University, Indianapolis. A Frontier of Internal Medicine. J. B. Lippincott Company, 1935.

This book in 442 pages presents a concise description of everything from asthma to anxiety and swings from renal calculi to schizophrenia. While the discussions dealing with the functional disorders are broadminded and clear, those concerned with treatment leave something to be desired. Thus, arsenic is not mentioned under general paresis nor sodium amytal under catatonic schizophrenia nor dehydration and encephalography under epilepsy. A number of neurologists would undoubtedly take exception to the author's recommendations of chloral hydrate and chloroform for status epilepticus.

The neuro-psychiatrist will find little that is new, much that is old, and some that is questionable. The student may derive some use from this volume

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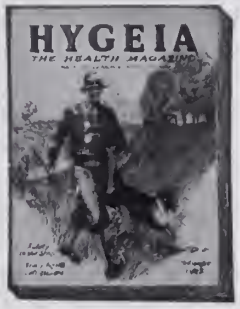

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especially from the orderly presentation of the various diseases. However the author, in our opinion, has erred on the side of too rigid a discussion and apparently considers schizophrenia and manic depressive insanity as definite psychopathological entities rather than malignant pattern types to which some psychotic individuals are susceptible. The general practitioner may find this a satisfactory book for quick, though superficial, reference. A. C. W.

The Principles and Practice of Medicine. Originally written by the late Sir William Osler, BT., M. D., F. R. S. Twelfth edition; revision by Thomas McCrae, M. D., Fellow of the Royal College of Physicians, London; professor of medicine, Jefferson Medical College, Philadelphia. D. Appleton–Century Co., New York, N. Y.

This book, well known since the first edition in 1892 and used the world over, continues to be a helpful friend to the medical student and practitioner alike. No book has a more enviable reputation and the reviewer's comments could neither add nor detract from this fine work. As has always been true, it can be recommended wholeheartedly.

The general make-up of the book is such that it is easily recognizable. However, because this twelfth edition has been completely reset with a different type, not only has the appearance of the volume been improved, but it is read with more ease.

The new knowledge of many subjects has been brought up-to-date, in some instances, to a surprising degree. There appears to be less lag from the time of revision until publication than is usual in textbooks as there are several references to work of 1934. Revisions and additions are particularly numerous in the discussions of treatment.

Many diseases are included for the first time, notably Haverhill Fever, Hyperparathyroidism, Lymphogranuloma Inguinale, Congenital Short Esophagus, Idiopathic Hypochromic Anemia, and Pituitary Basophilism (Cushing's Disease). There are several others, less important and too numerous to mention. A persistent error has been corrected in this edition by removing the group, Diseases of the Spleen, from the section on Glands of Internal Secretion and placing it under Diseases of the Blood-Forming Organs where it belongs. O. O. M.

The International Medical Annual. Price $6.00. William Wood and Company, Baltimore, Md.

The International Medical Annual for 1935 is an extremely comprehensive volume. This annual review of the literature, prepared by a group of English physicians and surgeons, covers all phases of general medicine and surgery, as well as the specialties of each division. It is excellently written, and the organization, which is alphabetical by titles, makes the book a convenient one for easy reference. The illustrations are unusually good.

It is impossible in a short review to comment on all of the interesting work reported in this volume, but a few outstanding points will be briefly mentioned. An infectious disease called "epidemic pleurodynia" has attracted attention, due to an outbreak in England in August, 1933. In 1923 this condition was named "epidemic transient diaphragmatic spasm" in the United States. Thirty cases of this condition were admitted to the Massachusetts General Hospital between August 1st and 25th, 1933. The chief importance of the recognition of the syndrome is the elimination of a more serious diagnosis. Appendicitis, perforated ulcer, angina pectoris, pericarditis, urethral and gallbladder calculi were each considered a tenable diagnosis in certain cases. The pathology of so-called catarrhal jaundice is still a matter of debate, and Hurst believes the term has been applied to two really distinct conditions: (1) Cases of gastroduodenal or biliary catarrh with obstruction of the ducts, and (2) cases of mild subacute hepatic necrosis. He believes that most cases diagnosed as catarrhal jaundice really belong to the first group.

There is a large mass of accumulating evidence of the success of ergotamine tartrate (gynergin) in the treatment of migraine.

The reality of the increase of carcinoma of the lung was questioned at the annual meeting of the Associated Physicians of Great Britain and Ireland. As a result of every comprehensive review and critical analysis, the opinion was given that the increase was only apparent, not real. Several cases of successful total pneumonectomy were reported.

The possible toxic effects of dinitrophenol in connection with the "slimming" process are discussed. Certain English workers report that from clinical observations, it would appear that dinitro-orthocresol is in the region of five times as potent as dinitrophenol and no more dangerous if the administration is carefully controlled.

Special attention is directed to appendicitis in patients past forty. It is maintained that in a considerable number the symptoms and course are entirely atypical, suggesting anything rather than appendicitis and that the diagnosis is easily missed. The heavy mortality from appendicitis in the United States is again pointed out.

It is of interest that the editors state that "some remarkable new work has been done on the action of morphia on the alimentary canal; apparently it stimulates rather than paralyzes intestinal muscle."

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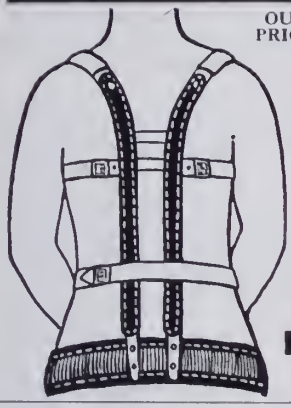

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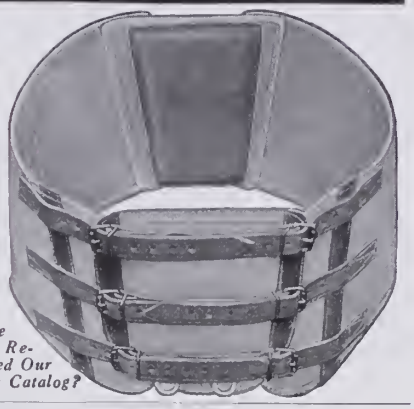

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The work referred to is that of Orr of Kansas, reported in November, 1933. The report in 1923 by Plant and Miller of the University of Iowa, of this came conclusion from experimental work on dogs, and in 1926 of the identical conclusion in both dogs and man, has evidently been overlooked.

The dramatic control of severe acute pyelitis by the intravenous injection of urotropin is discussed. This form of therapy appears to be without value in chronic cases.

A method of treating tuberculous cystitis by injections of methylene blue and liquid paraffin is described, and it is claimed that the results are better than those obtained by any method previously used.

Transplantation of adrenal glands in Addison's disease is discussed. The ideal is to remove the adrenals from a healthy adult within an hour or two of death by accident; the glands of a stillborn infant have usually been employed up to this time.

Cerebral surgery becomes more and more daring. At least four patients have survived removal of one whole cerebral hemisphere for glioma, and an operation to obliterate an aneurysm of the circle of Willis has been successful.

Corneal contact glasses are described in detail as regard their uses; how fitted and their value as a protection in cases of keratitis. A case of recovery from infectious cavernous sinus thrombosis after occlusion of the sinus by electrocoagulation, is reported.

Australian workers again attempt to answer the question whether tobacco and alcohol play any part in the production of angina pectoris. After a study of 750 patients they concluded that neither the use of nor the abstinence from tobacco or alcohol plays any important part in the genesis of angina pectoris. In certain individuals, however, the use of tobacco apparently aggravates or precipitates the attacks, while alcohol in occasional patients helps to prevent or relieve the attacks.

In view of subsequent work the specificity of Gordon's test in Hodgkin's disease may have to be reconsidered.

The question of early surgical interference in acute cholecystitis is extensively discussed. Six papers, all noteworthy, have been contributed by American surgeons. It is stated that "the management of acute cholecystitis arouses more differences of opinion among surgeons than that of any other acute abdominal disease of like importance." Opinion is divided in England, in favor of intervention without delay in France, and in general conservative treatment in Germany. In the United States the majority have preferred to wait for the attack to subside unless the condition is urgent, but the recent American contributions are mostly in favor of prompt surgery.

The value of the sheep-cell agglutination test as a valuable diagnostic method for differentiating infectious mononucleosis from a number of much more serious conditions is discussed. It has proved reliable in a very high percentage of cases.

A study of forty cases of patent intraventricular septum is given. Existing alone, this congenital defect is symptomless and free of danger. It is important that it be accurately diagnosed and this is not considered by the writers to be difficult.

The two hypotheses commonly held to account for gestational polyneuritis are reviewed. More recently there has been a tendency to assume a deficiency of the vitamin B complex. Nevertheless the opinion is given that "the uterus should probably be emptied as soon as the condition is diagnosed, but the disease is not necessarily improved thereby."

In looking over such resumé of the work published in one year, one is impressed with the scope and bulk of new information and the absolute necessity for the practitioner of medicine to read widely if he is to give his patients the best advice and care. Time to be spent in reading could probably not be employed to better advantage, from the general medical point of view, than in reviewing such a volume as this. M.L.C.

Emotions and Bodily Changes. By H. Flanders Dunbar, M.D., Ph.D., departments of medicine and psychiatry, Columbia University. Columbia University Press, New York, N. Y.

This volume of 595 pages represents a most comprehensive survey of the literature from 1910 to 1933 on psychosomatic relationships, and is the author's attempt to bring together the important research material having a bearing on the bodily expression of emotional experiences. The material of 2251 articles is presented in abstract and commentary form. The book is divided into 3 parts: Part 1, deals with orientation and methods; Part 2, the organs and organ-systems, and Part 3, therapeutic considerations.

It is a book with which every specialist should be familiar. The surgeon who appreciates that the thyroid gland is only secondary in importance to the emotions and the vegetative nervous system will become more conservative in the treatment of hyperthyroidism. The problems of the internist may be simpler (or less simple as the case may be) when he reads of the effect of emotional disturbances on not only the chemical constituents of the blood but on the cell content and upon the function of all organs. Psychogenic polycythemia and psychogenic hyperthermia are among the entities well illustrated by documentary scientific evidence. Every system and all the sense organs are dealt with and evidence abounds for bizarre and diverse perversions of function under the influence of emotions.

Since a bibliography is the superstructure upon which any well directed piece of research or writing is to be built, this volume will be of inestimable value to the worker in any field—psychological, biochemical, physiological, anatomical, dealing with the emotional effect upon bodily reponses.

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A.M.A. Council on Pharmacy and Chemistry Reports, 1934. American Medical Association, 535 N. Dearborn St., Chicago, Illinois.

The material in this volume comprises all the reports and comments of the Council on Pharmacy and Chemistry for the year 1934 concerning their favorable or unfavorable action upon compounds submitted for inclusion in the New and Nonofficial Remedies.

MORTALITY RATES

(Continued from page 639)

cy and of labor 20%, hemorrhage 14%, and embolism with sudden death 8%. This investigation revealed that about half of those maternal deaths belonged to classifications where adequate prenatal care has been demonstrated to have lowered mortality. However, a very large number of these women never presented themselves to their physicians for care until time for delivery. About the same per cent of avoidable deaths still holds, although in the years immediately following this study the maternal deaths have remained lower than previously. In spite of this, maternal deaths have not been reduced to the low level which has been shown to be possible by the records of many of our counties.

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IN THIS ISSUE

ADDRESS OF THE PRESIDENT
By Ralph M. Carter, M. D.
X-RAY IN TUBERCULOSIS
By A. U. Desjardins, M. D.
CHOLECYSTECTOMY
By J. M. Hayes M. D.
ABDOMINAL SURGERY
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TABLE OF CONTENTS PAGE 704

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TABLE OF CONTENTS

ORIGINAL ARTICLES

Page

What About the Future by Ralph M. Carter, M.D., Green Bay ---- 713
The Action of Roentgen Rays on Tuberculous Processes by Arthur U. Desjardins, M.D., Rochester ---- 719
The Prevention and Treatment of Complications Following Cholecystectomy by J. M. Hayes, M.D., Minneapolis ---- 731
Pitfalls in Abdominal Surgery by V. F. Marshall, M.D., Appleton ---- 736
Carcinoma of the Colon by F. A. Stratton, M.D., Milwaukee ---- 741

EDITORIALS

The County Secretary ---- 744

MISCELLANY

Ralph M. Carter, M.D., President, 1936 ---- 745
Society Proceedings ---- 746
Woman's Auxiliary ---- 746
News Items and Personals ---- 751

Page

Engagements, Marriages, Deaths ---- 752
Society Records ---- 753
Radio Program ---- 753
Medical Economics ---- 753
Report of Annual Meeting, Milwaukee, 1935 ---- 757
- Committee Appointments
- Council Awards
- Actions of House of Delegates
- Committees Selected
- Councilor Elections
- Golf Tournament
- Supplementary Report, Committee on Medical Economics
- Assemblyman Vernon Thomson Honored

Physician Registrants at Milwaukee Meeting ---- 765
Legislature Kills Last-Minute Bill Extending Time for Malpractice Suits ---- 780
Wisconsin Anti Fee-Splitting Law ---- 780
Inter-State Postgraduate Medical Association Meeting ---- 782
Books Received for Review ---- 784
Book Reviews ---- 784
Exchange Advertisements ---- 785

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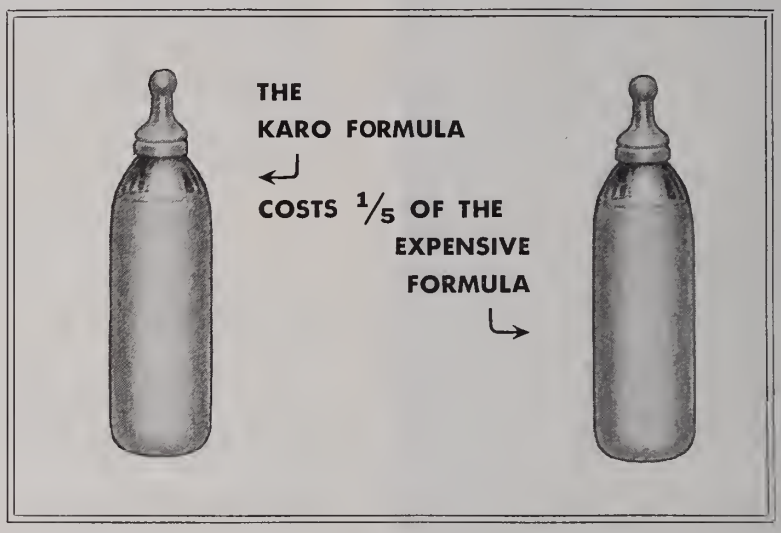

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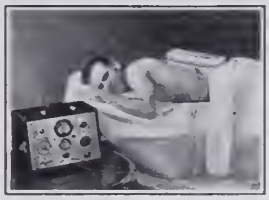

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(1) J. Amer. Med. Assn. 97, 1890 (1931)

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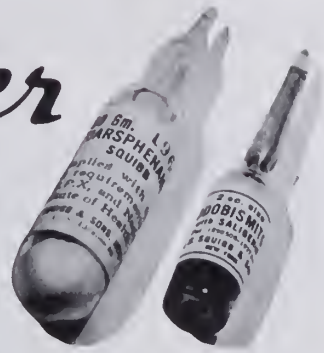

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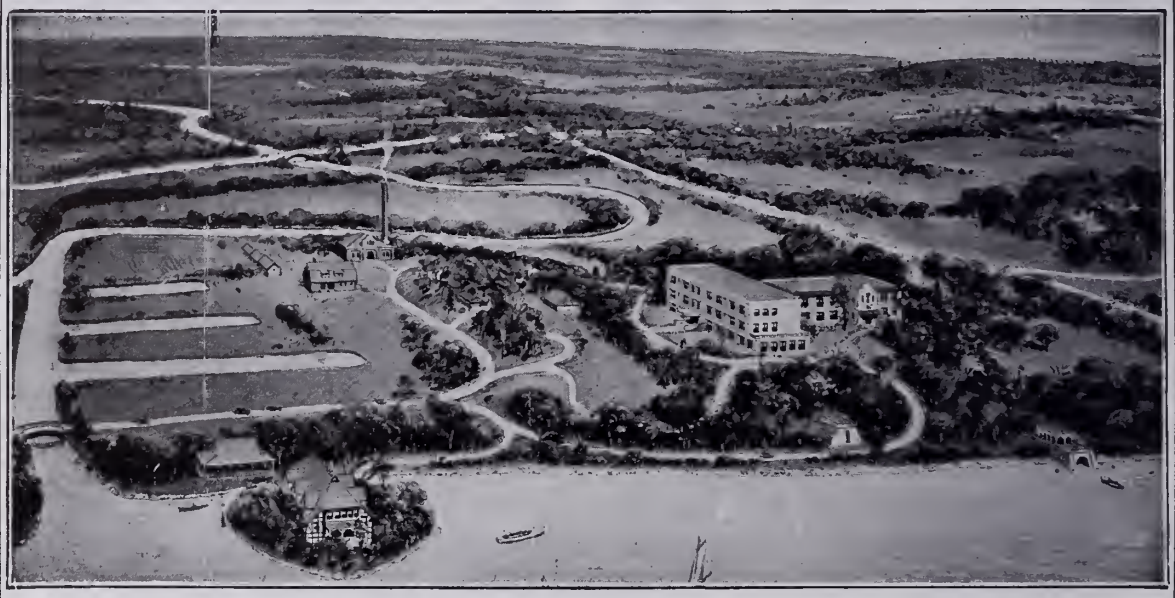

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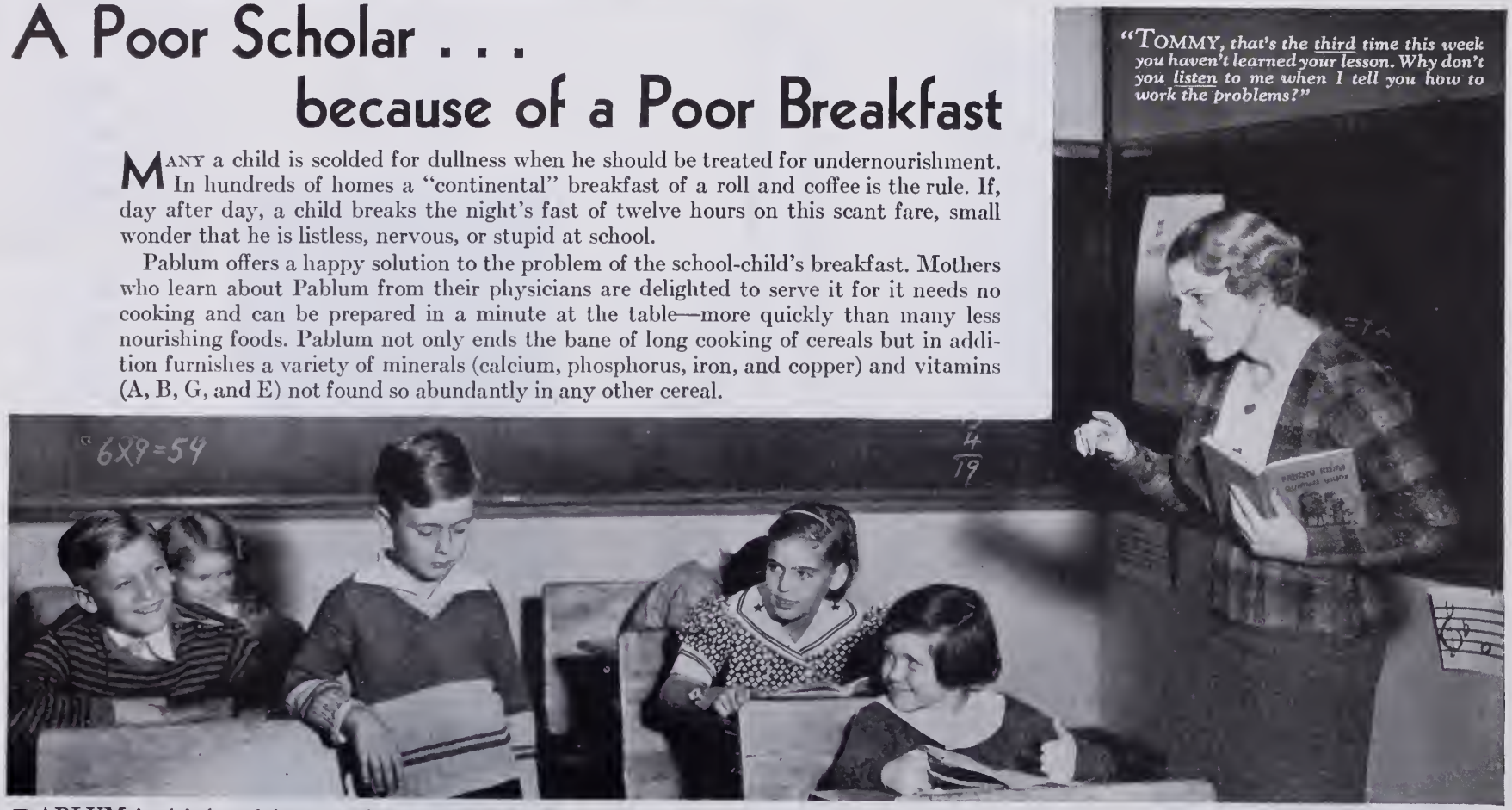

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Volume XXXIV OCTOBER, 1935 Number 10

What About the Future*

By RALPH M. CARTER, M. D.
Green Bay

DURING the past few years, the subject of medical economics in all its various ramifications has been thoroughly belabored. Speakers and writers, both lay and medical, have discussed its various aspects exhaustively and exhaustingly; meetings have been held, county and state societies have formulated plans to meet a situation which is supposed to exist, the American Medical Association has classified these plans, and very considerately recommended none of them, and the American College of Surgeons has also attempted to do its bit, with no very brilliant results. Medical journals and lay magazines have been filled with these discussions, and the end is apparently not yet. If one seriously attempts to read this mass of literature, as I have done, in the hope of finding some really constructive suggestions which will be generally applicable to the practice of medicine over the whole country, he will probably find himself in the same state of mind in which Omar Khayyam was when he wrote:

"Myself when young did eagerly frequent
Doctor and Saint, and heard great argument
About it and about: but evermore
Came out by the same door where in I went."

In order to allay at the outset any apprehension in your minds that this is going to be another discussion on medical economics, let me say that I do not so consider it. I believe, however, that there are certain aspects of medical practice which have not been given sufficient consideration by practitioners in general, and it is some of these things with which I wish to concern myself. I further believe that the cure for many, if not most, of the evils which now afflict us rests in the hands of the medical profession itself, and if this cure is not applied, then we ourselves are to blame for what may happen to us.

It has been vociferously proclaimed throughout the land that large numbers of our population are not receiving adequate medical care; that the quality of medical care which certain sections are receiving is the cause of great dissatisfaction; that this is an urgent problem requiring solution in the immediate future; that organized medicine is incapable of grappling with it successfully, and that therefore it must be taken out of our hands by various all-wise lay organizations, such organizations not specified, but undoubtedly sooner or later political, with all that this implies. It has been further stated that civilization has advanced, times have changed, and that the time-honored methods of medical practice are out of date, and like capitalism, should be discarded in favor of something new.

That all of these statements contain some element of truth cannot be denied; that they are by no means true in their entirety, I hope to be able to show by a brief analysis of each of them.

To begin with, let us seek the source of the original agitation of the problem of medical care. Did it begin with the physicians? All of you know that it did not. It is true that for years, there have been certain abuses in medical practice, such as contract and lodge practice and similar evils, which have given rise to great dissatisfaction in certain quarters among the members of the medical profession, but these were not proclaimed aloud to the world, and earnest effort and thought were and are being given to their elimination

* Presidential Address, 94th Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, Sept. 19, 1935.

and correction by the profession itself, which will undoubtedly lead to a satisfactory solution of the problem without outside help.

Did this agitation for more and better medical care proceed from the people themselves? To answer this question, all any doctor in this or any other state has to do is to refer to his own experience. If the entire membership of the American Medical Association were polled upon this subject, I believe that the number of those who had actual knowledge of general dissatisfaction with medical care among the public at large would be found to be infinitesimally small. This is not to say that there is no dissatisfaction whatever with the medical profession; there is, always has been, and always will be, and undoubtedly there would be just as much under any other system of medical practice, whether it be state medicine, compulsory health insurance, or what not. If all people thought alike, there would be no Christian Scientists, no followers of chiropractic, naturopathy, or others of the numerous cults. But to make the statement that there is at the present day great and widespread dissatisfaction with the amount and character of medical service, is, in my opinion, not stating the facts.

Under ordinary circumstances, with regard to all commodities and services required by the public, if the commodities or services furnished are unsatisfactory, and steadily becoming more so, as we are led to believe in regard to medical service, the consumers, in this case the public at large, are not slow to voice their dissatisfaction in no uncertain terms. On the other hand, if the conditions under which the services are delivered are generally unsatisfactory, the purveyors of the service, in this case the physicians of the country, are going to make strenuous efforts to change these conditions. But apparently such has not been the case, either as regards the public or the medical profession. Parenthetically, let it be clearly understood that I am here referring to medical practice in general; there are undoubtedly localities in which conditions are bad, both from the viewpoint of the physician and from that of the public. But when the number of individuals affected by these local conditions, both physicians and public, is considered in relation to the total number of practicing physicians and to the population of the country, I believe that the number will be relatively so small that my main argument is not affected.

SOURCE OF AGITATION

If neither physicians nor public are responsible for the agitation for more and better medical care, the search for the source of this agitation must be pursued still farther. It will be recalled that most of the turmoil has arisen within the last eight or ten years, and that it has greatly increased in amount since the publication of the Final Report of the Committee on the Costs of Medical Care, adopted October 31, 1932, and published in November, 1932. This date is also significant, as it corresponds roughly to the incoming of the present national administration, with its plans for a more abundant life.

Turning to the Introduction of this final report, entitled Medical Care for the American People, we find that it starts out with the following truism: "Pain, sickness, and bereavement have shadowed mankind throughout the ages; today there is a vast amount of unnecessary sickness and many thousands of unnecessary deaths." This theme is briefly developed by reference to infant mortality, tuberculosis, pellagra, hookworm, syphilis and gonorrhea, cancer, etc. Dental deficiencies, diseased tonsils, disorders of vision and other conditions are also mentioned.

The Introduction then takes up the advances which have been made in medical science during the past fifty years, and continues, "We have the knowledge, the techniques, the equipment, the institutions, and the trained personnel to make even greater advances during the next fifty years. We know how to do things which we fail to do or do in an incomplete and often unsatisfactory manner. As a result of our failure to utilize fully the results of scientific research, the people are not getting the service which they need—first, because in many parts of the country it is not available. The costs of medical care have been the subject of much complaint. Furthermore, the various prac-

titioners of medicine are being placed in an increasingly difficult position in respect to income and facilities with which to work. . . .

"Aware of this unsatisfactory situation, some 15 leaders in the fields of medicine, public health, and the social sciences came together for a conference in Washington on April 1, 1926. Various aspects of the general problem were discussed, and the organization of a committee to carry on a program of research was suggested. This group, however, was not at once willing to commit itself to such a plan. Further study was considered necessary. A committee of five was appointed, therefore, to investigate the possible need for a new committee. Some seventy-five prominent citizens, both professional and lay, were consulted by mail; the response was almost unanimous in favor of creating a new organization to carry on an extensive program of research in the various economic aspects of medical care. Accordingly, at a conference in Washington, May 17, 1927, (at the time of the annual meeting of the American Medical Association) which was attended by some 60 representative physicians, health officers, social scientists and representatives of the public, the nucleus of the present Committee on the Costs of Medical Care was created, and an executive committee was appointed. A Director of Study was immediately engaged to propose a program of research for the consideration of the Executive Committee and to engage the necessary personnel. After considerable study a five-year program of research, consisting of 17 studies, was adopted by the Executive Committee on February 13, 1928. . . ."

I assume that the original committee of 15 was self-appointed; there is no evidence in the report to the contrary; I also assume that some or all of these fifteen appointed the other members of the final committee. It would also be of interest to know the names and business connections of the seventy-five prominent citizens who were consulted by mail.

And where did the money come from which financed the work of the Committee? The Introduction tells us:

"The work of the Committee would not have been possible had it not been for the generous support of eight foundations. They have remained in the background, but as the work of the Committee has developed, they have been most helpful in providing the necessary funds. Two foundations gave special assistance in two or three emergencies when the need for money was pressing. The Carnegie Corporation, the Josiah Macy, Jr., Foundation, the Milbank Memorial Fund, the New York Foundation, the Rockefeller Foundation, the Julius Rosenwald Fund, the Russell Sage Foundation, and the Twentieth Century Fund have provided the financial support necessary for the Committee's own extensive five-year program. The Social Science Research Council and the Vermont Commission on Country Life have each made a grant for a special study."

Comment is unnecessary, as the conclusions are plain. We need seek no further for the original source of the agitation and propaganda. Your able Secretary, George Crownhart, in a small pamphlet which all should read, has shown what these various foundations are. And instead of the depression, with its unrest and discontent, being the cause of the alleged desire for changes in medical practices, it merely provided a Heaven-sent opportunity for the launching of propaganda. In normal times, I have no doubt but that the report of the Committee would have fallen flat, and by now, nothing more would have been heard of it.

The statement has repeatedly been made that large numbers of our population are not receiving adequate medical care. Such a statement is true only to a limited extent; to be at all accurate, it requires considerable qualification, but this is never done by the proponents of medical reform.

"LYING BY INDIRECTION"

The inaccuracy consists in the unqualified use of the word "adequate". The average layman, upon reading or hearing the statement that large numbers of our population are not receiving adequate care, immediately envisions large numbers of people ill and suffering, possibly dying, because they are too poor to have medical attendance, and in my

opinion, this is the effect which the statement is intended to produce. As physicians in active practice, we know that such conditions do not exist, and that this is lying by indirection. The real truth of the matter is, of course, that in the statement above quoted, the word "adequate" is used in the sense of "complete". Certainly we can all agree that there are large numbers of people who are in need of dental care, who have defective vision, who have infected tonsils, who need instruction on matters of hygiene; there are many children who need protection against smallpox, diphtheria, and other conditions. But this is as much, if not more, an indictment against the people themselves than it is against the medical profession. Preventive medicine and public health measures are matters of education, and much ignorance, stupidity, and indifference has to be overcome. Can anyone who realizes the enormity of this problem believe that conditions will be any better under any system of state medicine whatever? The proposition that people are suffering from lack of adequate medical care is propaganda and nothing else. As to the lengths to which this propaganda is being pushed, I quote an editorial note from the August, 1935, issue of the Journal of the Indiana State Medical Association:

"Several newspapers recently have carried items concerning a survey conducted by the Children's Bureau of the Department of Labor, which reported that a lack of medical treatment is 'the most disturbing feature about the whole question of health.' The survey was made in selected areas of five cities, one of which was Terre Haute, Indiana. According to the statement, 43 percent of the families surveyed needed medical treatment at the time of the survey, but it was not being received, and in 30 per cent of the cases the reason was that the family could not afford private care. Some question has been raised concerning the justification of the statements by the Children's Bureau, and a check is being made as to their source and accuracy. Such statements naturally will promote ideas in favor of compulsory sickness insurance. We shall have more to say on this subject in a later issue."

In view of such statements as these appearing widely in the press, can anyone doubt that the whole question of sickness insurance is anything other than organized propaganda?

That the quality of medical care which certain sections of the country are receiving is not as good as it should be, and that much dissatisfaction results therefrom is another statement which is apparently deliberately calculated to deceive, and which cannot be taken at its face value without further qualification. Certainly it is true that many of the smaller communities and country districts especially are without hospitals and laboratories. But at the present day, the number of communities, and it might be added, the number of families for which the services of a well-trained physician are not readily available, must be very small indeed. Such being the case, hospitals, laboratories, and even medical groups in every community are not necessary, or even desirable. Any practicing physician today readily recognizes conditions in which are needed services of any nature beyond his power or equipment to furnish, and with modern roads and automobiles, such services are readily available to anyone anywhere, whether he has money or whether he has not. But is this fact ever emphasized in the statements made to the public, and does the vast majority of the public ever stop to think of it for themselves? Of course not, because that would not fit in with the plan.

NO EMERGENCY

If my point of view is correct as it has been developed in my argument so far, and if it is true that actual conditions of medical care are not nearly so hopeless as they have been made to seem, then the argument that this is a problem of great urgency and emergency which requires immediate solution falls to the ground. As I have repeatedly said already, there are undoubtedly certain conditions requiring correction, but satisfactory correction will not come as the result of political experimentation. As a matter of fact, the lives and happiness of human beings are not fit subjects for experimentation at any time; when any change involving deeply-

rooted customs and habits is made, it should only be made after long and conscientious study by those best fitted to undertake a solution of the problem; it should certainly not come as the result of the efforts of a self-appointed group of reformers. All of us will be glad to see the day when all diseases and defects with which people are afflicted can be prevented or corrected; but when that day arrives, if it ever does, it will come as the results of the efforts of the medical profession, aided by cooperation on the part of the public, and not as a result of State Medicine, compulsory health insurance, or other similar schemes.

We now come to the argument that times have changed, civilization has advanced, and that the time-honored practice of medicine is out-moded. That the conditions of living have changed in the past forty years, no one can deny; as to whether or not civilization has advanced is a proposition about which there may be some reasonable difference of opinion; but it does not necessarily follow that because of these changes, the present methods of medical practice are out of date. The automobile has displaced the horse, the use of the telephone has become widespread, good roads have annihilated distances, the population has become predominantly urban instead of rural, hospital construction has been rapid and extensive, the advance of medical science has been phenomenal, leading to the rise of specialism, people are better educated and demand more. Certainly all this must be admitted. But with all of these revolutionary changes, there is one important factor in the situation which has not changed, and which seems to be commonly overlooked, and that is human nature itself. The psychological state of the ill or injured individual is the same today as it was one hundred or two hundred years ago. He wants to get well, and to aid him in this, he wants a physician whom he knows and feels that he can trust, one in whom he has confidence. In this state of mind on the part of the patient, and the relationship arising therefrom between patient and physician, lies the hope of the medical profession. But in order to realize this hope, a duty rests upon each individual physician to take stock of himself, and by his conduct toward his own patients and toward the community at large, to prove the value of private medical practice, and bring it to the position of general esteem which it should occupy.

There is no question but that a spirit of commercialism pervades the modern practice of medicine which was formerly lacking. The public itself feels this to a certain degree. And I believe that these same Foundations and their representatives are responsible for much of this spirit; in their agitation for social medicine and sickness insurance, and in their eagerness to "sell the doctor" on their ideas, they have constantly stressed the fact everywhere and at every time that the doctor would get more money from such a plan. I have no quarrel with any man for desiring to make as great a financial success as possible: such a desire is universal. Nor have I any criticism for the man who adopts business methods and attempts to collect what is due him. But for any physician to make financial gain the primary object of his efforts is wrong, and a few individuals of this sort in a community can soon bring the entire profession into disrepute. In the last analysis, Medicine exists solely for the prevention, alleviation, and cure of disease, and not, as some few seem to think, for the purpose of furnishing doctors with a fat living. The medical profession arose in response to an urgent need of Society; in return for the satisfaction of this need, Society has always furnished the members of the profession a living, and will continue to do so, so long as it does not feel that it is being preyed upon. Doctors have always done much work for which they received no pay, and they probably always will. It is true that there have been great abuses of charity, but many of these are susceptible of correction by the united efforts of the profession, provided the correction is gone about in the right way. However, after all is said and done, many services will have to be rendered for which there is no prospect whatever of pay, the sole reward being the satisfaction derived from the consciousness of duty well done; if one is unwilling to accept this fact, he does not belong in the private practice of medicine.

ART OF PRACTICE

Another justifiable criticism which can be made of the modern private practice of medicine is that the art of practice is disappearing in favor of the science. If we expect to successfully resist the encroachment of state medicine, this art has to be recovered. The family doctor of the past had developed the art of practice to a high degree, but his science was negligible; the modern physician, on the other hand, has usually much science, but little art. Both should go together; the physician should summon all of his science to his aid in the diagnosis and treatment of the disease, but he should at the same time develop his art so that it can be applied simultaneously in the treatment of the patient. A sick man, of course, wants to get well, and in calling his doctor, he assumes that the latter is competent to make a diagnosis, and arrange for proper treatment; if he is really ill, even more he wants sympathy, understanding, and a little of the milk of human kindness, things which it is to be feared he does not always receive today. It has been asserted that with changing conditions, the need for the family doctor has disappeared, and that he is on the way out. With this statement, I do not agree. As I said above, human nature has not changed, and so long as this is true, people still feel the need of a guide, counsellor, and friend to whom they can turn in times of trouble. And who is better fitted to assume this responsibility than the doctor, if he will prove himself worthy of it?

In short, as I see it, the task now confronting the members of the medical profession is to again sell themselves to the American people, and to demonstrate to the people that no scheme of state medicine can take the place of private practice. To do this, we have got to reaffirm certain ideals, and prove to the people that we are living up to them. The chief and most important of these ideals is, that the health and well-being of the public is the paramount business of medicine. We must make this our chief concern, although by so doing, all of us will undoubtedly do much work for which we can expect no pay in dollars and cents. But as compensation, we will gradually regain the confidence and esteem of our people.

NEED OF ORGANIZATION

The accomplishment of much of what has been here suggested rests upon the attitude and efforts of every individual practitioner, but working unaided, he cannot accomplish everything. The need for strong medical organization was never greater than it is today. Every practicing physician should belong to his county society, which is the unit upon which the state and national societies are based. It is only through the county society that the individual practitioner is able to effectively voice his opinions and express his will. He should not only belong to the society to the extent of paying his dues, but he should take an active interest and part in its affairs.

Our task today is to convince the public that the medical profession is truly its friend; that we, as physicians, are more interested in preserving and restoring health than we are in exploiting the people for our own advantage, as seems to be widely thought in some quarters. If we accomplish this, a long step toward public confidence will have been taken.

The basic principles underlying this program are as follows:

1. To promote cooperation between the medical profession and the community at large, and to convince the public that the profession is truly its friend, and has its interest at heart.

2. To see that all health activities of the community are sanctioned and approved by, and under the direction of the county medical society, where they properly belong.

3. To see that all those engaged in medical and health work receive compensation, to some extent, at least.

Such a program, varying naturally in certain details according to circumstances, can be carried out in every community. To properly carry it out requires a strong, united county society. Such a society need not be large, but all physicians in good standing should be members of it, and in sympathy with its aims. The first important step is to establish a relationship of friendly coop-

eration between the representatives of the medical society and the representatives of the public, such as city councils, county boards, and others, and to convince them that we are serious and in earnest. Once this is accomplished other things will naturally follow. For this program to succeed, there must necessarily be cooperation between the various members of the medical society itself; individual differences must be forgotten, and every man, when called upon, must work for the common good. Results will come slowly, but by persistent effort, they cannot fail to be obtained.

In this paper, I have attempted to discuss some of the troubles which presently afflict the medical profession and the public, and to suggest a plan whereby, if it were generally adopted, many of these troubles might be obviated, to our mutual benefit. The advantages of my plan are that it requires no greater expenditure than that of some time and much thought on the part of individual practitioners and organized medicine, that it can be abandoned at any time with no serious detriment to anyone unless it be to the practitioners themselves, and that it can be put into operation anywhere at any time without an Act of Congress. The biggest advantage is, however, that it can do no harm, and will in all probability in the long run work as well as any other plan which has heretofore been proposed. I leave it with you for your earnest consideration.

As your incoming President, let me assure you that I fully appreciate my responsibilities, and have been frequently assailed by doubts as to may ability to successfully cope with them. However, I shall do my best. Let me urge each and every one of you to become familiar with the Constitution and By-Laws of the State Society, learn to know the various standing committees, and the various services which the Society can render you. This is your Society; it does not belong to the officers, who are here only to carry out your will, as expressed through the delegates from the various component county societies. During the coming year, with the assistance of your other officers, and with your continued cooperation, I pledge you my word to do all in my power to advance the interests of the medical profession of the state in every way.

The Action of Roentgen Rays on Tuberculous Processes*

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ONLY a few months had elapsed after Roentgen's announcement of the discovery of x-rays when certain enterprising spirits undertook to test their effect on tuberculous processes. At that time tuberculosis was much more prevalent than it is today, and the search for a cure or for a means of prevention was active and widespread. As a result of the early clinical application of roentgen therapy, first to tuberculosis of the lungs and later to tuberculosis of lymph nodes, it was found that the lesions often receded satisfactorily. Between 1896 and 1900, experiments on animals confirmed the action of the rays on tuberculous lymphadenitis, and since then localized tuberculous lesions of other structures have been found to respond well, although somewhat slowly, to irradiation. More recently, the value of natural or artificial heliotherapy as an adjunct to radiotherapy for tuberculous processes in general has been established. The doctrine that tuberculosis of one organ or structure is but the local manifestation of a general infection still holds true for some cases, but it is also realized that often physiologic or metabolic depression is secondary to a tuberculous focus somewhere in the body, and disappears as the pathologic process is influenced by judicious treatment.

The Eye

The experiments of Jendralski (1922) and Stock (1926) with roentgen rays, and those of Flemming and Krusius (1911) and

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of Takahashi (1924) with radium indicate that irradiation retards the evolution of tubercles in the ocular structures, and that the influence of the rays is greatest during the infiltrative stage of the lesions. Bettremieux (1903), Stephenson (1903), von Hippel (1918), Jendralski (1921), Hensen and Schäfer (1924), Mylius (1927), and others have shown by clinical reports that tuberculous conjunctivitis and keratitis seem distinctly amenable to roentgen-ray treatment. In many of the cases treated the tuberculous process resolved completely, while in other cases only temporary improvement was obtained. In tuberculous iritis also reports of cure or improvement have been published by Rollet and Bussy (1920), Jendralski (1921), Birch–Hirschfeld (1923), Stock (1925), Scheerer (1925), Wetterstrand (1926), Mylius (1927), and Martenstein and Richter (1927). Only small doses, repeated at regular intervals, should be used to treat tuberculosis of the eye. The exact dose naturally depends on the interval. In general, from 50 to 75 per cent of an erythema dose of rays of medium wave length, filtered through 4 mm. of aluminum and repeated once a month, is sufficient. A smaller dose repeated more frequently is not likely to yield superior results.

Lymph Nodes

The favorable action of roentgen rays on tuberculous adenitis is now widely, although not generally, recognized, and many patients still do not receive the full benefit of medical science. The truth of this statement is evidenced by the fact that many patients are advised to paint the affected part with iodine or are subjected to operations which may sometimes be necessary but which as often are unnecessary or indeed inadvisable. Some lesions of this kind must or should be dealt with surgically, but the extensive surgical excisions formerly in vogue are now seldom required. At the present time, in fact, surgical treatment should be confined to incision and drainage, and occasionally to curettage, of the caseating or suppurating contents of one or more broken down lymph nodes. In some cases incision and drainage could be effectively replaced by withdrawing the pus through a needle of large bore, and the danger of sinus formation might thus be obviated. In other cases, however, the softened, purulent material within the broken down glands cannot be withdrawn in this manner, even through a needle of the largest bore. Under such conditions, the only alternative is surgical incision and drainage. When the tuberculous nodes have not broken down and when caseation is not excessive, exposure of the affected region to roentgen rays may render other measures unnecessary and may often, indeed usually, be followed by gradual improvement and cure. But even when some of the nodes require incision and drainage, the surgical act may usefully be followed by irradiation of surrounding nodes in the same region. In this way other infected nodes may be prevented from undergoing caseation and may be made to heal.

Tuberculous adenitis most commonly affects the lymph nodes in the neck, but the fact that the cervical nodes are involved does not mean that the nodes in other regions may not also be infected. Cases are occasionally encountered in which the infection may be confined to the axillary or mediastinal nodes, while in other cases the mesenteric and retroperitoneal nodes, or the nodes throughout the body, may have become diseased. When the infection has spread to the lymphatic system over a wide area or throughout the body, this generally implies disease of structures or organs other than lymph nodes, and the general condition and resistance of the patient often have been more or less undermined. Under these circumstances, roentgen irradiation is not so effective, but may still be useful in selected cases, especially if combined with sound, carefully regulated, natural or artificial heliotherapy and with suitable regulation of the patient's life, activities, and diet. In other words, extensive tuberculous adenitis should be treated as a systemic infection, except that, if contraindications do not prevent, the general therapeutic measures should be supplemented by roentgentherapy and heliotherapy.

In the absence of extensive or generalized infection, tuberculous adenitis in any single

region, whether in the axillary, mediastinal, or other region, may be expected to respond as favorably to irradiation as tuberculous inflammation of the cervical nodes. In any case the best results usually require exposure of the affected region to roentgen rays, supplemented by daily exposure of the entire body to gradually increased doses of ultraviolet rays. Roentgen irradiation of the infected group of nodes should be repeated at intervals of four weeks, and this may have to be continued for from three to twelve months. The quantity of roentgen rays given to each field should not exceed 80 per cent of the so-called erythema or skin tolerance dose, or about 450 roentgens* (erythema dose, 560 r in air). To give a full erythema dose, especially if this is greater than 560 r, and if this should be repeated a number of times, is to subject the patient to the unnecessary risk of telangiectasis or actual radiodermatitis. Moreover, if the dose should exceed the tolerance of the skin overlying rather superficial nodes, there is the additional danger of inducing a reactive inflammation which might tend to spread or increase the activity of the tuberculous process rather than to diminish it. As for the quality of the rays, it may be said that rays of medium wave length are sufficient and quite as effective as, if not actually more effective than, rays of short wave length.

The following case shows that even tuberculous inflammation of mediastinal nodes, if caseation and calcification are not prominent features, may be most favorably influenced by irradiation.

Case 1. A woman, aged fifty-three, registered at the clinic March 8, 1928. For six or seven years she had noticed that her heart missed an occasional beat at night and this interfered with sleep. From that time she had attacks of vertigo and of fatigue, from which she could obtain relief only by lying down. Her pulse rate had been more or less steadily elevated, but electrocardiographic examinations in 1927 had not disclosed any definite disturbance in the cardiac rhythm. During the month preceding registration the right side of the neck had swelled and became sore and a slightly enlarged node adjacent to the right sternomastoid muscle had become palpable. This was accompanied by occasional soreness on the right side of the neck. At that time it seemed most likely that since the tonsils and one tooth had been infected for some time previously the slight cervical adenitis might be a result of such infection. Accordingly she was advised to have the tonsils removed and the tooth extracted. Tonsillectomy was performed on April 4, 1928, and these organs showed chronic inflammation, fibrosis, pus and ulceration in the crypts. Subsequently, the soreness of the right side of the neck increased, the enlarged nodes on this side did not recede, and other nodes on the right side of the neck also enlarged.

Fig. I. Roentgenogram of the thorax May 18, 1931, showing bilateral globular broadening of the mediastinal shadow in the portion extending between the heart and the level of the clavicle, and representing enlarged tuberculous lymph nodes.

On May 21, 1931, pus was evacuated, some of the enlarged nodes on the right side of the neck were removed surgically, and microscopic examination showed these to be tuberculous. A roentgenogram of the thorax on May 18, 1931, (Fig. I), showed a circumscribed broadening of the upper mediastinal shadow. This was assumed to be due to enlarged mediastinal lymph nodes and the previous history made it seem likely that these nodes also were tuberculous. On this assumption roentgen-ray treatment was instituted, the patient receiving the first course between June 29 and July 1, 1931. The treatment was directed to the mediastinum, and to both sides of the neck, because on the right side several enlarged nodes were still palpable. A second course of treatment was given between July 27 and 29. By this time the condition of the patient had improved considerably, the lymph nodes in the neck had almost disappeared and a roentgenogram of the thorax on August 24, 1931, (Fig II), showed sub-

* The roentgen (r) is the international quantitative unit of roentgen rays.

Fig. II. Roentgenogram of the thorax September 21, 1931, showing substantial retrogression of the mediastinal tuberculous adenitis.

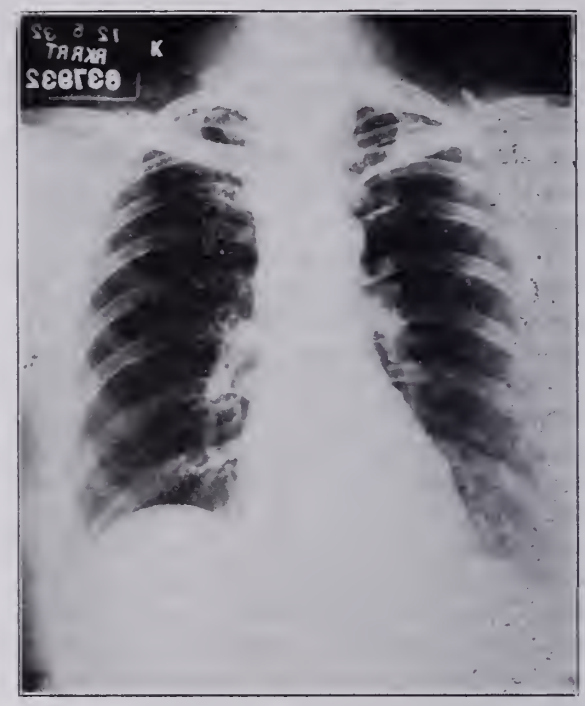

Fig. III. Roentgenogram of the thorax December 5, 1932, showing practically complete retrogression of the mediastinal tuberculous lymphadenitis, the clinical symptoms of which also had disappeared.

stantial retrogression of the enlarged mediastinal nodes. Moreover, the rate of such regression confirmed the clinical and roentgenologic assumption of tuberculous mediastinal adenitis. Additional courses of treatment were given between August 24 and 26, September 21 and 22, and on December 7, 1931. By that time the roentgenologic appearance of the thorax was normal (Fig III) and the enlarged nodes on the right side of the neck had disappeared.

As far as the tuberculous process is concerned, the patient's condition has been entirely satisfactory since that time. An interesting point, also, is that the tendency of the heart to miss an occasional beat, the abnormally high pulse rate and the undue tendency to fatigue have disappeared and the patient feels well.

Nasal Mucous Membrane

What has been written concerning tuberculous lymphadenitis also applies to tuberculous lesions in general, but the degree of such application varies more or less according to the number and extent of the lesions, and especially according to the stage of the lesions. Havens (1931) has shown that tuberculous granulations of the nasal mucous membrane may be cured by treatment with radium. If such a result can be obtained with radium, roentgen irradiation would undoubtedly yield a similar result with even less inconvenience to the patient, because the intranasal application of radium would be unnecessary.

The Larynx

Tuberculous infection of the larynx is usually secondary to pulmonary infection, although in a small proportion of cases it may occur independently of demonstrable invasion of the lungs. Usually also, tuberculosis of the larynx does not occur until after pulmonary lesions have existed for some time and have reached a fairly advanced stage of evolution, but exceptions to this rule are not infrequently encountered. As a rule, tuberculous infection manifests itself by hoarseness and sometimes by dysphagia and pain, but some patients are not aware of any laryngeal disturbance. When present, hoarseness results from infiltration and interference with the vibration of the vocal cords, and dysphagia from inflammatory swelling of the laryngeal structures and mechanical resistance to distention of the esophagus by food. Methods to relieve these symptoms are generally of little avail,

and improvement depends chiefly on the behavior of the pulmonary lesions. Therefore, any method that tends to diminish or cure the tuberculous infiltration of the larynx, even though it may not have any influence on the tuberculous process in the lungs, is a boon to the patient.

It was Birkett (1904) who discovered that roentgen irradiation may be beneficial and who reported the first case of tuberculous laryngitis cured by this method. In a series of experiments on sixteen rabbits, in which they had been able to induce laryngeal tuberculosis by direct inoculation with a sputum emulsion of Mycobacterium tuberculosis of human type, Brünings and Albrecht (1910) found that, in some of the animals that survived long enough to yield worth while information, the tuberculous lesions on the irradiated side of the larynx were less extensive and showed greater proliferation of connective tissue in and around the tubercles. By themselves these experiments were little more than suggestive, because the number of animals was too small to furnish conclusive data. Nevertheless, the changes observed corresponded absolutely to those found by others in irradiated, tuberculous lymph nodes. Since then, many others, among whom may be mentioned Wilms (1910), Menzer (1919), Klewitz (1921), Spiess (1922), DeFlines (1922), Amersbach (1922), Kottmaier (1923), Beck (1923), Debicki (1924), and Goldstein (1927), have given clinical evidence that in many cases the pain, dysphagia and hoarseness abate and disappear, and that subjective improvement is accompanied by corresponding recession and healing of the laryngeal lesions. As might be expected, complete healing does not occur in all cases, because the evolutionary stage of individual tubercles at the time of irradiation may vary considerably, and because complete repair of the laryngeal lesions is not likely to occur in the presence of marked or advanced tuberculosis of the lungs. Moreover, most of the foregoing authors agree that the favorable effect of irradiation is greatest in the productive or infiltrative stage of tuberculosis but, even when infiltration is accompanied by ulceration, exposure of the diseased larynx to roentgen rays commonly results in substantial improvement, and sometimes in cure.

A point made by several authors is that, in spite of the undeniable therapeutic value of roentgen treatment, such treatment should not be relied on to the exclusion of other methods. Another point, emphasized by Debicki and applying to radiotherapy for tuberculous processes in general, is that a moderate, quantitative dose of rays is sufficient and that a maximal dose, such as is commonly used in treating tumors, is likely to yield inferior results or may be actually dangerous.

The Lungs

Many physicians are not aware that roentgen rays have been used rather extensively in pulmonary tuberculosis, and that, at least during certain stages of the disease, such therapeutic irradiation of the affected lungs rests on a rational basis. Within a few months after Roentgen's announcement of the discovery of the rays, their possible therapeutic value was being tested, at first in this country and later, and more thoroughly, in Europe. Moreover, the experiments of Lortet and Genoud (1896) which had shown a favorable influence of the rays on tuberculous adenitis, strengthened the hope that they might prove as useful in tuberculosis of the lungs. The clinical reports of Rendu and Du Castel (1897), Bergonié and Mongour (1897), Chanteloube, Descomps and Roulliès (1897) indicated that, in certain cases, roentgen rays have a definitely beneficial effect on the tuberculous process. Additional experiments on tuberculous lymphadenitis by Fiorentini and Luraschi (1897), Mühsam (1898), and Rodet and Bertin-Sans (1898) stimulated still greater interest by showing that the rays may exert an unmistakable, though somewhat limited influence on the specific lesions of tuberculosis. This influence is characterized by inhibited evolution of the tubercles, diminished tendency to caseation, and accelerated proliferation of connective tissue and calcification.

Until 1913, however, evidence to support the clinical application of roentgen therapy for pulmonary tuberculosis was relatively

meager. It was at this period that the work of de la Camp and Küpferle (1913) led many physicians to think that, after all, roentgen treatment might be worth while, and many others, including Fränkel (1914–1915), Berns (1915–1916), Müller (1918), Menzer (1919), Strauss (1919), Iselin (1920), Stephan (1921), Windrath (1921), Gassul (1922–1923), and Schulte–Tigges (1924), recorded their results which, in the main, substantiated the claims of de la Camp and Küpferle. Like the latter, many of the authors mentioned that the treatment should be reserved for cases of stationary or slowly progressive, indurated tuberculosis in the early stages and should be limited to institutions in which the patients can be kept under constant observation by experienced physicians and in which they can receive at the same time other well established kinds of treatment.

As far as dosage and the best method of irradiating the lungs are concerned, opinions have varied considerably, but the majority of radiologists have agreed that moderate doses are preferable to large doses. A few radiologists have advocated small doses, but later they found it expedient to increase the dose, because they apparently came to realize that too small doses are not so effective. To be more specific, doses varying between 50 and 80 per cent usually yield better results than doses smaller than 50 per cent of the erythema dose. Another point about which there has been considerable division of opinion has been the advisability of giving the total dose at one time (within from one to three days) or of dividing the dose into a series of short sittings at intervals of from a few days to a week. Usually divided doses given in short sessions are preferred, because such a plan minimizes or prevents systemic reaction, a rather important point in pulmonary tuberculosis, in which any interference with or impairment of nutrition may have more or less serious consequences. It is probable that these two methods were devised to meet special conditions. Under ordinary circumstances, the middle course of giving the total dose within a limited number of days, with individual sessions short enough to avoid systemic reaction, would seem preferable. The important points are that the total dose given at any one course of treatment should be large enough but should not exceed 80 per cent of the erythema dose, and that irradiation should be repeated at regular intervals of about four weeks. Of course, these points do not apply when rays of short wave length are used. In this event it is wise both to reduce the total dose and to increase the interval between courses of treatment.

Prior to 1918, roentgen rays were generally used alone or more commonly they were combined with hygienic and climatic measures the value of which had long been recognized. After 1918, an increasing number of physicians continued to use roentgen rays for local irradiation of the respiratory organs, but also employed ultraviolet rays for general irradiation, because such rays, obtained either from the sun or from artificial sources such as quartz mercury-vapor or carbon-arc lamps, had been found to exert a distinctly beneficial influence on many forms of tuberculous infection, Küpferle, Bacmeister, and de la Camp, who have been the three most prolific contributors to the literature of this subject, began to use both roentgen and ultraviolet irradiation in the treatment of their cases. Indeed, during the last few years there has been a tendency for ultraviolet rays to supersede roentgen rays in professional favor. This probably has been due to the greater availability and ease of employment of ultraviolet rays, and also to the realization that, in many tuberculous states, such rays have a distinct general tonic effect which many regard as even more valuable than the comparatively limited and local action of roentgen rays. Others have discarded or have not taken up the use of roentgen irradiation because, by itself, it cannot be relied on to cure the disease in a large proportion of cases. The majority of those who have had sufficient experience to venture an opinion have advocated roentgen therapy in the chronic, productive or proliferative forms of the disease, especially during the first stage or early part of the second stage, but not in the acute and exudative forms.

Prior to 1911, roentgen treatment for phthisis had always been direct, and the

favorable influence of irradiation on the pulmonary lesions had been regarded as a direct effect of the rays. Manoukhin (1922) rather startled the interested radiologists when he advocated indirect treatment by irradiating the spleen, and claimed results equal or superior to those obtained by the direct method. Manoukhin's method, or some modification, was tried by others, with apparently similar results. Among the modifications thus tested may be mentioned irradiation of both the lungs and spleen; the lungs, spleen and long bones, the spleen and long bones, and also general exposure of the entire body.

On the whole, the clinical observations relating to pulmonary tuberculosis agree fairly well with those relating to tuberculosis of lymph nodes and other structures. It is true that the action of roentgen rays on tuberculous lymphadenitis has been demonstrated rather more conclusively than on tuberculosis of the lungs and that roentgen therapy for the former has been generally accepted by the profession as the therapeutic method of choice. Several reasons may explain why the same method for pulmonary tuberculosis has not received such wide recognition: the experimental and clinical evidence is not so conclusive; the treatment of pulmonary tuberculosis is more generally carried out in institutions; the multiplicity of explanations for the effects observed and reported has tended to create confusion and doubt. One reason why the influence of the rays on pulmonary tuberculosis may not be so great as on tuberculosis of lymph nodes probably is that in the lungs tubercles are more numerous than those in the nodes, and greater variation in degree of evolution of the tubercles is to be found in the lungs than in the nodes. The difference in structure and function between the lungs and lymph nodes also may be an important element in the problem.

Tuberculous Peritonitis

Some years ago surgical treatment of tuberculous peritonitis was the rule, but during recent years the more favorable results obtainable by roentgen irradiation have led an increasing number of surgeons to abandon laparotomy. The reports of Bircher (1899–1906 and 1920), Iselin (1920), Stepp (1920), Brasser (1924), Lang (1923), and others had much to do with this change in opinion. Of thirty-five cases reported by Beck (1923), twenty-nine (or more than 82 per cent) were said to have been cured by radiotherapy. Others, including Weibel (1922), Iselin (1920), Stepp (1922), and Edling (1925), have claimed cure in from 62 per cent to 82 per cent, the difference probably depending partly on the selection of cases and partly on the mode of irradiation and associated therapeutic measures. Some authors thought the results best in the exudative form, while the majority seemed to think that if the general condition of the patient had not been too seriously undermined and if the disease has not extended too far, the exudative or adhesive features do not greatly influence the results. However, it has been a common experience that the adhesive form tends to respond more slowly than when the disease has not progressed beyond the exudative stage.

Although radiotherapy may be considered the method of choice, surgical measures, at least to the extent of reducing intraperitoneal pressure by draining excess of fluid or by draining collections of pus, sometimes is advisable or necessary. It is also important to realize that, while roentgen irradiation of the diseased abdominal structures may be sufficient to bring about improvement or cure, many cases have been cured by natural or artificial heliotherapy. In some sanatoria, indeed, heliotherapy in addition to the usual hygienic measures, is regarded as sufficient. Nevertheless, the best opinion now favors exposure of the abdomen (through anterior and posterior aspects) to a moderate dose of roentgen rays once every four or five weeks, supplemented by daily exposure of the entire body to gradually increasing doses of ultraviolet rays. There is no question that this combined method gives superior results.

The best method of irradiating the abdomen is to divide its anterior surface (xiphoid cartilage to pubis) into four fields centering on the umbilicus, and the posterior surface should be divided into corresponding fields. Again a moderate quantitative dose (60 to

80 per cent of the erythema dose) of rays of medium wave length (130 to 140 peak kilovolts), filtered through 4 or 6 mm. of aluminum (depending on the thickness of the abdomen), is sufficient. Approximately equal results can be obtained with rays of shorter wave length. In this event the quantitative dose given to each field should be reduced appreciably, but even then treatment with such rays is more time-consuming, more expensive, and the results are no better. With rays of medium wave length the average patient can tolerate one field per day, but in some cases, it may be desirable to proceed even more slowly. One essential is to avoid systemic reaction that would only serve to impair the patient's nutrition, often already compromised, or that might induce more serious complications. If women are still menstruating the dose of rays given to the lower anterior and posterior abdominal fields should be reduced sufficiently to avoid inducing amenorrhea (allowing for repeated treatment), unless for various reasons cessation of menstrual function should be desirable.

The Kidney

When renal tuberculosis is confined to one kidney, surgical excision of the affected organ remains the therapeutic method of choice, but when both kidneys are infected or when the kidney remaining after an antecedent removal of the other kidney also becomes infected, periodic exposure to roentgen rays may result in substantial, temporary improvement or exceptionally in actual cure. An interesting example of cure in a case of this kind was reported by Ross (1921), and the patient was still well in 1931.* When both kidneys are involved, a measure of improvement may follow irradiation, but cure can hardly be expected. In cases of unilateral tuberculosis there is reason to think, and some authors have found, that postoperative irradiation results in more rapid resolution of residual tuberculous deposits, and tends to prevent the formation of fistula or to heal pre-existing fistulas. Again, periodic exposure of the affected region to roentgen rays should preferably be supplemented by daily, progressive heliotherapy. Of course, if the renal disease is associated with more or less extensive tuberculosis of other organs, especially of the lungs, the influence of irradiation will depend largely on abatement or cure of the associated lesions by appropriate treatment.

The Bladder

Inasmuch as tuberculous cystitis is practically always secondary to tuberculous nephritis, improvement or cure must depend on cure or eradication of the renal lesions. After nephrectomy, however, exposure to roentgen rays of the bladder alone or of the remainder of the urinary tract may, in certain cases, cause the inflammation of the bladder to subside more rapidly than would appear to be the case otherwise. But since, at least in unilateral tuberculosis of the kidney, nephrectomy is often followed by gradual and sometimes fairly rapid amelioration in the condition of the bladder, the evidence in favor of radiotherapy can hardly be regarded as conclusive. Nevertheless, the reports of Wetterer (1908, 1913–1914, and 1919–1920), Stepp (1922), Jüngling (1924), and Beck (1923) lead one to think that periodic exposure of the bladder to a small dose of roentgen rays tends to reduce the spastic phenomena, relieve the symptoms and hasten resolution of the inflammatory deposits.

Tuberculous Epididymitis

Concerning the treatment of this condition professional opinion is somewhat divided. The majority of surgeons favor epididymectomy or orchidectomy, while the views of other physicians vary from radiotherapy in early cases of primary tuberculosis and operation later, if the result of periodic irradiation for a certain length of time is not satisfactory, to operation forthwith and postoperative exposure to small doses of roentgen rays at intervals of four or five weeks. The evidence furnished by published records is hardly such as to settle the question. The fact remains that a thorough test of radiotherapy, desirable as it might be, has never been undertaken. If roentgen rays have such a well attested, although sometimes limited, favorable effect on tuberculous

* Personal communication.

processes affecting many other tissues, it would be logical to expect a similar effect in early, uncomplicated epididymitis, or even orchitis, but thorough coöperation by the patient would undoubtedly be an essential factor. Also general heliotherapy would probably be an invaluable adjunct. When the lesions are extensive, however, prompt surgical measures, followed by radiotherapy and heliotherapy, undoubtedly are indicated.

Female Genital Structures

In the majority of cases tuberculosis of the fallopian tubes and ovaries is secondary to tuberculous peritonitis, but in some cases the infection appears to have originated in the tubes. While this may be the first recognizable manifestation of disease, it seems more than likely that the infectious elements were carried to the tubes from some undeveloped and remote focus or through the lower portion of the genital tract. Regardless of its precise origin, however, the diagnosis of tuberculosis of the tubes and ovaries, in the absence of clinically demonstrable lesions elsewhere, is often difficult. Many gynecologists advocate surgical extirpation and some surgeons concur in this view, especially when the disease is unilateral or complicated by mixed infection, bleeding or severe pain. Other surgeons, however, tend toward a more conservative view, especially in uncomplicated cases.

The difficulties of diagnosis and the mortality incidental to operation have led some surgeons and others to try radiotherapy, and the results reported by Vögt (1920), Weibel (1922), and others tend to support the view that, in suitable cases, roentgen irradiation may yield favorable results. The possibility or likelihood of inducing artificial amenorrhea is not a serious objection in such cases, because, if uncontrolled, the disease itself may have a similar effect. Nevertheless, the mere possibility has impelled certain authors, notably Jüngling (1924), to advocate a dose of 10 to 20 per cent of the so-called erythema dose.

Bones and Joints

Many physicians are not aware that roentgen therapy may play a useful part in the treatment of tuberculous infection of bones and joints, especially of children and in a certain measure also in older persons. As pointed out by Edling, surgical treatment is most important during the active period of life, but on this point surgical opinion varies widely. On the one hand are those who, like Bier and Rollier, seldom operate, while on the other hand are many who resort to operation whenever general or special contraindications do not prevent. The decision between the two depends chiefly on economic factors, but also on the circumstances surrounding the patient's life and on the relative accessibility to skilled surgery or to heliotherapy under proper conditions. Even when surgical intervention is resorted to, however, many surgeons in several European countries advise supplementary exposure to roentgen rays alone or to roentgen and ultraviolet rays. In this country radiotherapy has never had a thorough test. Naturally, the resolving and healing effect of radiotherapy is slow; otherwise, few patients would be willing to submit to operation. Resolution of the tuberculous process and repair of the affected bones or joints usually require repeated treatment over a period extending from six months to two or three years. Moreover, periodic exposure of the diseased bones or joints to a moderate dose of roentgen rays should preferably be supplemented by daily exposure of the entire body to gradually increasing doses of sunlight or of ultraviolet rays emitted by an artificial generator.

If roentgen treatment is undertaken, most important is it to remember that, under no circumstances, should a tuberculous bone or joint be treated like a malignant tumor. The dose should always be moderate, and in any case need not exceed 75 per cent of the so-called erythema dose or tolerance limit of the skin. Jüngling, Holfelder, Altschul, Edling, and many others who have contributed to this phase of radiotherapy, favor doses ranging between 10 and 70 per cent of the erythema dose. If experience with the action of the rays on other tuberculous lesions counts for anything, I should incline toward a dose between 60 and 80 per cent, but divided into as many separate sessions as

may be required to prevent systemic reaction that would tend to impair the patient's nutrition. In general it may be said that rays of medium wave length are quite sufficient. When the disease affects small joints, such as the wrist, ankle or knee, rays filtered through 4 mm. of aluminum are adequate, but when larger joints are involved the rays should preferably be filtered through 6 mm. of aluminum. When rays of short wave length are used, the quantitative dose given to each field may wisely be reduced to 50 per cent or less. But superior results can hardly be expected unless the patient's life is adjusted to provide improved conditions of rest, nutrition, air, and general hygiene.

ACTION OF ROENTGEN RAYS

The numerous experiments undertaken to ascertain the action of roentgen rays on different varieties of bacteria, including Mycobacterium tuberculosis, have, in the main, yielded negative results. Certain kinds of bacteria have been found susceptible to very large doses of rays, but not to doses such as are ordinarily or could safely be used in treating human beings. How, then, may the indubitable influence of roentgen rays on tuberculous processes be accounted for? As the result of a large number of experiments to test the radiosensitiveness of different varieties or cells it has long been known that, of all the cells in the body, the lymphocytes and polymorphonuclears are by far the most susceptible. By experimental and clinical observation it has also been established that many acute and chronic inflammatory conditions, especially during the early stage when leukocytic infiltration is a prominent feature, are peculiarly amenable to irradiation. Those who have had experience with roentgen-ray treatment of furuncle and carbuncle know that, when exposed early to a small dose of rays, most lesions of this kind promptly subside and disappear. Moreover, the rate at which the symptoms and the lesions themselves recede corresponds closely to the rate at which normal leukocytes are known to be destroyed by the rays. Leukocytic infiltration being one of the earliest, if not the earliest, step in the defense of the organism against invading bacteria, the natural consequence is that an inflammatory process should respond most favorably to irradiation when exposed to the rays at the height of leukocytic infiltration; and this is precisely what takes place. Moreover, according to the character and virulence of the infecting micro-organisms and according to the resistance of the patient, the degree of leukocytic infiltration in inflammations caused by different bacteria varies from patient to patient. To this circumstance is probably related the fact that, at least in acute inflammations, irradiation has a favorable influence in only 75 or 80 per cent of cases. When the infection is caused by virulent streptococci, for example, leukocytic infiltration is often noteworthy by its paucity or absence. In such cases, also, the beneficial effect of irradiation is known to be slight or nil.

All these points, in addition to actual and repeated observation of leukocytic destruction in inflammatory lesions induced under experimental conditions, make it appear most likely that the initial and main effect of irradiation is to destroy a proportion of the infiltrating leukocytes. The inevitable consequence of such cellular disintegration is that the antibodies, ferments and other protective substances contained by the destroyed cells are liberated and thus become more readily available for defensive purposes.

Whereas, in acute inflammatory processes a single irradiation often is sufficient, a well known feature of chronic inflammations is that successful treatment often, indeed usually, requires that irradiation be repeated at suitable intervals for some time. This is especially true in tuberculosis. The reason that, in tuberculous lymphadenitis, as in tuberculous infection of other structures, irradiation must be repeated many times appears to be that the specific lesions are made up partly of infiltrating leukocytes (especially lymphocytes), partly of caseous, purulent, or other material derived from degenerated cells, fibrous connective tissue, and sometimes of calcium in varying proportions. Calcium is not influenced by irradiation; neither is caseous nor purulent material. Connective tissue is relatively resistant to

the rays and is not affected appreciably by ordinary therapeutic doses. But lymphocytes and polymorphonuclear leukocytes are the most radiosensitive of all cells. Hence, the degree of leukocytic infiltration, on the one hand, and the proportion of connective tissue and of degenerative products, on the other hand, would seem to be the main factors influencing irradiation in opposite directions. This probably accounts for the more rapid regression of tuberculous nodes during the infiltrative phase. It has often been observed that when fresh tuberculous adenitis supervenes after surgical excision of previously infected nodes, radiotherapy is not so effective or may have to be continued for a longer time. This is generally attributable to increased proliferation of connective tissue and to disturbance of anatomic relations.

When the clinical evidence bearing on radiotherapy for pulmonary tuberculosis is reviewed, the same factors probably account for the favorable influence of roentgen rays when the lungs are irradiated directly, but these factors cannot possibly explain how similar benefit can result when not the lungs but the spleen or some other region remote from the lungs was exposed to the rays. In such cases the most plausible and satisfactory explanation seems to be that the rays destroy leukocytes in the spleen or circulating blood and that the antibodies and ferments thus liberated into the circulation increase the power of the body to deal effectively with the organisms in the lungs. Indeed, even when the lungs themselves are directly exposed to the rays, it is likely that not only leukocytes infiltrating the tubercles are destroyed but also leukocytes in the blood circulating through the lungs during irradiation.

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MEETING OF EDITORIAL BOARD

The Editorial Board of the Wisconsin Medical Journal will hold its fall meeting in Madison, Saturday, October 19th. Members of the Board are: Drs. Oscar Letz, Milwaukee; F. Gregory Connell, Oshkosh, and Stanley J. Seeger, Milwaukee.

The Prevention and Treatment of Complications Following Cholecystectomy*

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OUR first precaution in preventing complications following cholecystectomy is the assurance that the gallbladder is the offending organ; and our second, the detection and proper treatment of other pathology existing at the same time.

An accurate differential pre-operative diagnosis is, therefore, essential. The close proximity of the gallbladder to other important organs and the similarity of the symptoms of cholecystic disease to those of the diseases of the proximal organs often taxes the skill of the best diagnostician in arriving at an accurate and definite diagnosis. Disease of the liver, duodenum, colon, pylorus, right kidney and pancreas may simulate that of the gallbladder or they may occur at the same time.

Acute cholecystic disease has been confused with pneumonia, pleurisy, catarrhal or infectious jaundice, acute yellow atrophy, cirrhosis of the liver, syphilitic hepatitis, abdominal crisis of syphilis, herpes zoster, Pott's disease of the spine, acute appendicitis, coronary thrombosis, mesenteric thrombosis, cholangeitis and duodenitis. Removal of the gallbladder and failure to recognize other pathology may aggravate the condition so that the complication may be more serious than the original disease.

In a review of 287 operated cases diagnosed cholecystitis only, Rivers and Hartman found additional pathology in seventy-one percent of the cases. In 592 cases diagnosed cholelithiasis only, they found additional pathology in fifty-eight percent of the cases.

In the surgical procedure the principal factors to be taken into consideration in preventing postoperative complications are the following: (1) choice of the proper time for surgical interference, (2) preoperative preparation of the patient, (3) skill of the operating surgeon, (4) choice of anesthesia, (5) upper respiratory infections, (6) sudden changes of temperature postoperatively, (7) adequate dressing of the wound, and (8) drainage of the wound.

The fact that complications and additional pathology develop because of prolonged cholecystic disease has led to the suggestion of early surgical interference in this condition.

If we were positive that cholecystectomy would prevent complicating diseases and that this condition would not clear up without operation then we would be justified in doing cholecystectomy as soon as a definite diagnosis of cholecystic disease is made.

Enderlens and Holz call attention to the fact that the mortality accompanying cholecystectomy between the ages of 20 and 40 is from two to four percent, while between 40 and 70 years it carries a much higher mortality rate.

It is quite evident that many cases of abscess formation, perforation of the gallbladder, pancreatitis, malignancy and cholangeitis would be prevented by cholecystectomy in the young individual or before the disease had been present for a long period of time. On the other hand, it has been estimated that not more than eighty percent of all cases operated for cholecystic disease recover and are cured. The internist tells us that nearly that high a percentage may be carried along with a normal course of life under proper medical management.

It would seem, then, that the so-called chronic or mildly acute cases should be treated expectantly until such time as the disease definitely interferes with the normal course of life in spite of all other therapeutic measures.

In the severely acute cases quite a different problem presents itself and frequently a prompt and definite decision must be made.

* Presented before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, September 1934.

The jaundiced case may be chronic or it may be mildly or severely acute. In the jaundiced patient, if the onset is slow, painless, and continuous, with no elevation of temperature, malignancy should be suspected, especially in the older patient. And if malignancy is found in the head of the pancreas, the gallbladder should be preserved for a possible anastomosis to the duodenum.

In the mildly acute case the catarrhal or acute infectious jaundice may be confused with pressure on the common duct by a diseased gallbladder.

The following case report illustrates failure to make a definite diagnosis in these cases.

Case I: Patient was a female 53 years old. Her past history showed nothing but two or three mild attacks of epigastric pain. Following an attack of influenza she developed a rather painless jaundice. This was almost continuous with slight elevation of temperature and other symptoms quite typical of catarrhal jaundice. She was observed for nearly two months before being referred to surgery. After careful preoperative preparation she was explored under local and block anesthesia. The gallbladder was found to contain a large stone and this was bound down firmly on the common duct by an inflammatory mass. Removal of the stone and drainage of the gallbladder promptly cleared up the jaundice. The patient made a fairly good recovery from the operation but died three months later of nephritis. An accurate diagnosis and prompt surgical interference might have given a far better result.

In the severely acute cases, with no let-up in symptoms, where the pain continues unabated except with the use of narcotics, and if a high leucocyte count is present, early operation is advisable in the average case.

During the past eight years I have had a series of seventeen cases of empyema of the gallbladder. Ten of these were operated within the first seventy-two hours from the time of onset of the attack. None of these had a leucocyte of less than 12,000 and most of them had a count of 20,000 or more. None of these had any relief from pain from the beginning of the attack, except by the administration of morphine. All of these patients had a comparatively mild convalescence, their hospitalization ranging from ten days to two weeks, and none had drainage after leaving the hospital.

Of the seven cases operated later than seventy-two hours after the onset of the attack, two died—one from perforation of the gallbladder and one from coronary thrombosis while being prepared for operation. In one other case the gallbladder had ruptured and the necrotic material escaped into the peritoneal cavity but the patient recovered after several months during which there was drainage of pus and bile. All the remaining cases had a stormy convalescence and had long periods of postoperative drainage. In one case the drainage was continuous for three months; then the wound closed but had to be re-opened later on account of epigastric distress. The wound drained for several weeks more and then closed again. This recurred three times following the operation. Another patient operated elsewhere was in bed three months following the operation and had to have the wound re-opened nine times before it finally remained closed.

One patient with attacks of severe epigastric pain was not seen by a physician for several days after the onset of the attack. At that time the patient was in a state of collapse. X-ray of the chest revealed pleural effusion, and drainage of the pleural cavity revealed the presence of bile. After repeated aspirations the acute symptoms subsided and the patient gradually improved. Later the gallbladder was explored and revealed a perforation posteriorly. An abscess, well walled off from the peritoneal cavity, had extended upward posteriorly to the liver, ulcerated through the diaphragm, and invaded the pleural cavity. A partial cholecystectomy was done and large drains inserted. The patient had a long but rather mild convalescence, and drained for a long period of time, and still has attacks of epigastric distress. Early operation would undoubtedly have saved much time and discomfort for this patient.

In the ten cases operated within the first seventy-two hours, the history, physical findings and end results were much the same. I will cite the course of just one of these cases, which is fairly typical of empyema of the gallbladder.

Case II: The patient was a female, age 47 years. She had had three attacks of gall stone colic pre-

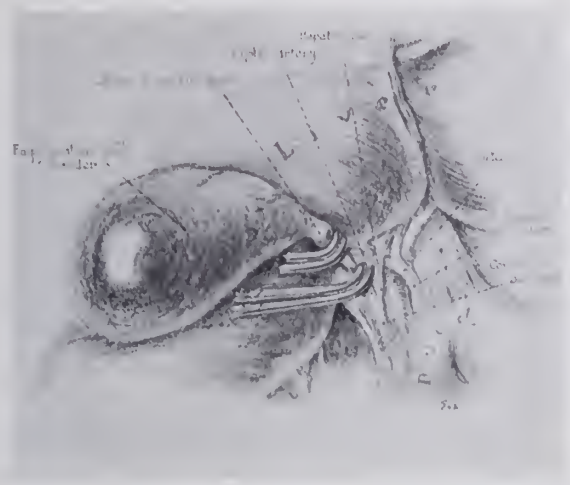

Fig. 1. Drawing of the condition in Case II. This shows the stone in the distal cystic duct pressing on the cystic artery. The portion of the cystic duct between the clamps appears about normal. The inflammatory process here is confined almost entirely to the gallbladder. It has not yet become adherent to adjacent organs.

vious to the time of operation. Three days before operation the patient was seized with a sudden severe attack of epigastric distress. At first the pain let up for short intervals, only to return more severe. Morphine was administered and relieved the pain for three or four hours, when it had to be repeated. This continued almost constantly for three days, at which time the patient entered the hospital for surgery. The patient was in extreme distress. She was unable to retain anything by mouth. Her temperature was 99°, pulse 100, and leucocyte count 22,000. A mass could be palpated in the area of the right kidney, which might easily have been mistaken for a *perinephritic* abscess. On exploration the gallbladder was found to be several times normal size, the fundus extending down to the kidney area. It showed a severely acute inflammatory process and was so tense, necrotic and friable that it could not be handled with instruments. The peritoneal cavity was well packed off with gauze and the gallbladder gently brought up with gauze on the gloved hand.

The severe process was practically confined to the gallbladder itself. The distal cystic duct was blocked by a stone where the stone also pressed on the cystic artery and that probably accounted for the almost gangrenous condition of the gallbladder. The gallbladder containing the necrotic material with the impacted stone in the distal cystic duct appeared like a bottle with a tight cork. If none of the contents was spilled, the trouble should be removed in this sealed container. In this case, as in most of the ten cases operated early, it would seem that most of the pathology was actually removed in this sealed container.

This patient had a very mild convalescence, had practically no drainage after operation, and left the hospital in ten days. I believe this type of case should be operated as soon as a definite diagnosis can be made, provided there is no other condition present to contraindicate operation.

SURGICAL SKILL

In no surgical procedure is the skill of the operating surgeon more important. Adequate exposure, gentle handling of the tissues, extreme care in preventing contamination of the peritoneal cavity, as well as reasonable rapidity, are essential in the prevention of postoperative complications.

On account of the proximity of this area to the diaphragm, pulmonary complications are common. Anesthesia sometimes plays an important role in the control of this complication. Too much preliminary narcosis may cause shallow breathing and lower the vital capacity of the patient. Ether is ordinarily considered to be the most irritating anesthetic so far as the lung is concerned; yet ether, in the hands of a highly trained anesthetist, with the highly trained, rapid surgeon operating on the average patient, will compare favorably with other anesthetics so far as postoperative complications are concerned.

Spinal anesthesia may be the anesthesia of choice where extreme quiet in the peritoneal cavity is essential, as in empyema of the gallbladder. It should not be administered to the patient already in shock or to one worn down by the ravages of disease.

Local and block anesthesia, or this supplemented by ethylene gas, is perhaps the safest anesthesia in the average operating room today. Patients with advanced carcinoma or those whose resistance has been reduced by long illness will usually show less postoperative ill effects from this than from any other anesthesia.

In the changing seasons of the year, or during epidemics of upper respiratory infections, upper abdominal operations must be made with extreme precaution if postoper-

ative pulmonary complications are to be avoided.

Sudden changes of temperature are sometimes difficult to avoid following a surgical operation. The patient under anesthesia in a warm operating room usually perspires freely. When wheeled through a cold corridor or into a room of lower temperature, or when windows are left open near the bed, the resistance of the patient may be lowered and he is thus made an easy victim for infections of various kinds.

Many postoperative wound infections are a result of improper dressing. When left to the interne or nurse, it is surprising how often the dressing serves to take in unclean material coming from above, rather than to exclude it. Sealing the edges down firmly, especially at the top, will usually prevent this. Again, the dressing must not be made tight enough to impair breathing or cause discomfort to the patient.

The subject of drainage in cholecystectomy wounds has been under discussion for some years. Some surgeons have gone on for many years with no mishaps because of lack of drainage, while other equally skilled surgeons have had sad experiences. The drain may add to the discomfort of the patient or act as a foreign body to promote local infection, yet it may act as a safety valve if leakage of bile should occur.

I had not drained a cholecystectomy wound for eight years, even in the acute cases, until finally a fatality in a comparatively mild case changed my attitude on this subject.

Case: The patient was a female, age 27 years. She had had attacks of gall stone colic for three years and finally had continuous epigastric distress before operation. There were no marked symptoms of an acute condition before operation. At operation the gallbladder was found to be well covered over with adhesions and the gallbladder and cystic duct were quite edematous. The gallbladder was separated out quite readily and removed, the cystic duct and artery having been doubly ligated with chromic catgut. The wound seemed dry and free from evidence of contamination at the time of closure and was closed without drainage. The patient's condition was very good that day and the following day, but on the morning of the third day her pulse suddenly rose to 160. There were no other definite symptoms present. A competent internist believed the disturbance due to a primary heart condition. In spite of heart stimulants and intravenous medication the patient went down rapidly and died less than forty-eight hours after the beginning of this upset. At autopsy the pathologist found a slight leakage of bile where the forceps had cut through the stump of the cystic duct where they had been put on preliminary to ligation. He gave bile peritonitis as the cause of death, although there were not more than two or three ounces of free bile in the peritoneal cavity. Adequate drainage would have saved the life of this patient. Since that time I have inserted a drain in every cholecystectomy wound.

One other case will illustrate how adequate drainage may save serious postoperative complications.

Case: This patient, a female 65 years old, had typical symptoms of cholecystic disease. The gallbladder was filled by one large stone and this pressed directly on the common duct where a hard, edematous area was present. When the gallbladder was removed a very thin wall was left in a small area of the common duct, but no repairing could be done on account of the brittle and friable condition of the tissues at this point. After removal of the gallbladder a small drain was inserted. The patient did well the first two days, taking food, and the bile going through into the bowel. On the third day she developed typical symptoms of peritonitis. A forceps was inserted along the drain. Bile flowed freely from the wound and the peritonitis cleared up rapidly, but the patient was unable to retain any food by mouth, and no bile appeared in the stool. For nearly six weeks nothing could be forced through the pylorus and for thirteen weeks no bile appeared in the stool. At the end of thirteen weeks bile appeared in the stool for the first time after the onset of the peritonitis. The biliary fistula soon closed and the patient has been well since. Evidently the wound was sealed about the drain when the bile first broke loose, and the retained bile set up a peritonitis which was relieved by adequate drainage. The inflammatory process from the peritonitis evidently caused obstruction to the pylorus and common duct. Adequate drainage following operation would perhaps have prevented these severe complications.

The following case illustrates the importance of preserving the gallbladder in pancreatic disease.

Case: A female, age 40 years, had her gallbladder removed after what appeared to be cholecystitis. The patient continued to develop severe attacks of epigastric pain and slight jaundice. These attacks gradually became more severe and the patient required so much morphine to relieve the pain that it was thought advisable to do an exploration. This

revealed a large chronically inflamed pancreas and a very much constricted common duct. A T-tube was inserted in the common duct and remained there for three months. During the time the tube was in, the patient seemed well and normal in every way. When the tube was removed there was recurrence of the attacks of pain. With these attacks a slight jaundice usually developed. Between the attacks the patient seems quite normal, but the attacks are becoming more frequent and more severe. We are still considering some method of short-circuiting the bile to the intestine. Under the present condition any method by which this can be done will perhaps be unsatisfactory. If the gallbladder had not been removed the process would be much more simple.

In all cases of lowered resistance and in generally poor surgical risks a preoperative high caloric diet should be given, especially if the glycogen reserve is low. In doubtful cases the dye test for liver function should be employed. Before operation glucose should be given intravenously. If this is not sufficient to supply the glycogen deficiency, sodium lactate in 10 to 20 gram doses may be given intravenously. In all jaundiced cases, after an accurate diagnosis has been made, bleeding and clotting time should be determined. If high, calcium chloride should be administered intravenously according to the method of Walters. Glucose and other fluids should be given before and after operation, and blood transfusion given if anemia is present.

Postoperative hyper-ventilation as a routine procedure is to be commended in cholecystectomy cases. Mild vomiting may be controlled by the administration of alkalies by mouth in small doses. If the vomiting is severe and protracted, nasal suction should be instituted. Long-continued vomiting lessens the blood chlorides. Saline solution by enteroclysis, hypodermoclysis, or intravenously, is indicated here.

Hypertonic saline solution intravenously serves best to stir up a delayed peristalsis. The patient who is normal except for the effects of the operation usually needs little special care except for routine hyper-ventilation and narcotics sufficient to relieve pain. With ordinary anesthetics the patient should be able to take fluids by mouth from 10 to 15 hours after the operation. If the patient is unable to take food by mouth, glucose and other fluids should be given in the vein or by enteroclysis and hypodermoclysis. Ordinarily morphine serves well for relief of pain but it may cause severe vomiting in some patients. In these cases it should be replaced by pantopon or some of the more recently developed narcotic drugs.

Postoperative pulmonary emboli are always a source of worry to the surgeon. Encouraging the patient to be active and the administration of thyroid extract may serve to lessen this possibility. Postoperative hernias may be decreased to some extent by the application of a very firm abdominal binder as soon as the patient begins to raise up in bed.

CONCLUSIONS

Accurate preoperative diagnosis and detection and removal of co-existing pathology, careful preoperative preparation of the patient, skillful handling of the operative procedure, exclusion of upper respiratory diseases at the time of operation, avoiding sudden changes of temperature after operation, careful selection of cases for closure without drainage, and routine hyper-ventilation after operation will prevent many postoperative complications in cholecystectomy.

When complications do occur postoperatively, they must be treated as they arise. Pulmonary complications may be treated by the administration of CO_2 and O, and by intravenous administration of glucose and other fluids.

Peritonitis is usually due to contamination of the peritoneal cavity during the operation or leakage of bile or infected material following the operation. Adequate drainage, with stimulants and intravenous fluids, give the patient his best chance of recovery from this doubtful complication.

Heart conditions, infections of the wound, and other common complications are treated as in all major surgery.

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Pitfalls in Abdominal Surgery*

By VICTOR F. MARSHALL M. D.
Appleton

IN THIS discussion on abdominal surgery, a pitfall may be defined as some failure on the part of nature to follow normal development, to some pathological process, or to some omission or commission on the part of the surgeon.

From the above definition the immense scope of the subject is obvious, therefore I was reluctant to accept the invitation for its presentation. Any attempt to adequately discuss this topic would mean the production of another system of surgery.

Our time is limited, and therefore one must confine the discussion to the preoperative phase of the subject.

At the outset it may be stated that the surgeon has no control over the ontology of an individual, and, consequently, cannot anticipate the pathological findings which he may encounter. Conversely, the surgeon may be derelict or unable, especially in acute conditions, to obtain the all-important complete history, or he may have made an incomplete physical examination. He may not have resorted to the indicated laboratory procedures, or he may have given a faulty interpretation to any of the preceding essentials. Moreover, this diagnostic error may be due to inexperience, incomplete knowledge or insufficient time in his undertaking.

Unjustifiable haste due to over-confidence on the part of the physician who has referred the case may result in premature surgery. Such procedure may also lead to a protracted convalescence and unwarranted expense to the patient, while the end result may seriously affect the reputation of the operator.

The cause of pitfalls may not wholly fall upon the surgeon, for the patient himself may be at fault in his failure to furnish the essentials which go to make up a complete and satisfactory history. The patient may err in his failure to understand the importance of a proper history. His physician may not have emphasized this phase preparatory to examination. The patient may forget or misunderstand important facts or the sequence of events. Other factors which may enter into the failure in obtaining a proper history from the patient may be his ignorance, either due to amnesia or amentia, or lack of confidence in the attending physician. The patient's natural fear of disease and its consequences; the fear of surgical intervention or of expense; the influence of faulty information from relatives or friends may have caused difficulties. The attending physician may have been directly responsible for faulty answers to vague questions which he has submitted to the patient. The patient's ignorance of medical terminology may lead to misunderstanding.

REPORT OF CASES

Case #1. J. C., aged 25, single, farmer, became ill some ten days previous to my visit. Dr. R. examined this patient at his home in the country some 26 miles from my office and requested me to come prepared to do an appendectomy. The predominant symptoms were pain and tenderness of the lower right abdomen, some abdominal distention, a feeling of malaise, absence of nausea and vomiting, but with a daily temperature, the highest being 101 degrees Fahrenheit. The onset of this illness was slow (10 days). His physician was convinced that the patient was suffering from an appendicitis with probable abscess formation. Following my arrival preparations were made for a laparotomy. Under ether anesthesia the abdomen was opened through a gridiron incision. The appendix was of moderate size, not unduly distended nor hyperemic. It was removed. It was noted that the caecum and ascending colon were indurated and moderately hyperemic. Several enlarged mesenteric glands were palpated. The abdomen was closed. Dr. R. was instructed to obtain a blood Widal test. This was proven to be positive. Several days later, rose-colored spots appeared upon the abdomen. The patient ran a course of an otherwise uncomplicated typhoid fever.

The pitfall in this case was dependent upon an incomplete history and physical examination, combined with the unwarranted urgency on the part of the patient's physician.

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Case #2. Mr. W. O., aged 39, complained of abdominal pain and nausea on his entrance into the hospital about noon. He went to work the evening before perfectly well. However, during the evening he was seized with a sudden severe attack of abdominal pain in the region of the stomach. The pain was described as "severe and griping". Nausea developed the morning of entrance. His previous history was irrelevant. Physical examination revealed a well developed, well nourished adult male who was in great pain and appeared acutely ill. The pulse was 80, respirations 20, temperature 97. No unusual findings were noted other than those found in the abdomen which exhibited board-like rigidity. There was extreme pain on pressure or upon the slightest palpation of the epigastrium. The urine was negative. The blood findings showed 83% polymorphonuclears. A diagnosis of a ruptured peptic ulcer was made. Through a high right rectus incision purulent fluid was noted in the abdomen. The appendix was gangrenous and ruptured with the onset of peritonitis. The appendix was removed and a soft rubber drain was placed through a stab wound. The patient suffered no further complications.

The pitfall in this case can be attributed to lack of a complete history and misinterpretation of the incomplete physical findings.

The patient gave no history of previous gastric disturbances. A thorough physical examination should have revealed more local rigidity and muscle spasm in the right lower quadrant. An x-ray might have shown the absence or presence of air in the abdominal cavity.

Letters were sent to various general surgeons with the request that they enumerate some pitfalls of surgery in the abdomen from their experiences. Most of the replies stressed the importance of a complete history and physical examination. Below are some of the conditions which were incorrectly diagnosed:

I. Extra-abdominal:
   - A. Disease entities, as the exanthemata, syndrome of the black widow spider bite, etc.
   - B. Lungs.
     1. Acute pleuritis.
     2. Pneumonia.
   - C. Heart.
     1. Coronary thrombosis.
     2. Angina pectoris.
   - D. Nerves.
     1. Tabetic crisis.
     2. Acute neuritis as "shingles".

II. Intra-abdominal:
   - A. Peritoneum—as in pneumonia or tuberculous peritonitis.
   - B. Intestine.
     1. Meckel's diverticulum.
     2. Unusual symptoms of appendicitis.
   - C. Pancreas.
     1. Acute pancreatitis.
   - D. Liver.
     1. Cirrhosis with ruptured esophageal varicosities.
     2. Amoebic abscesses.
   - E. Uterus and Ovaries.
     1. Retroposition.
     2. Failure to estimate endocrine factors before surgery.
     3. Ectopic pregnancies.
   - F. Kidneys.
     1. Pyelitis.
     2. Ectopic kidneys.
   - G. Ureters.
     1. Dietl's crisis.
     2. Ureteroliths.
   - H. Ruptured viscera.
   - I. Gangrene of omentum.
   - J. Thrombosis of mesenteric vessels.

AVOIDANCE OF PITFALLS

At times the actual condition is so masked that it is impossible to make a competent diagnosis and only the actual view of the pathology will clarify the situation.

However, if we use our powers of observation more intelligently, and our reasoning processes more thoroughly, probably the pitfalls will diminish to some extent.

At this time, let us review some fundamentals in the differential diagnosis of abdominal disease.

A complete history and physical examination is all important. The differential diagnosis of the usual abdominal pathology is well known; therefore, we will not mention it here.

I shall attempt to summarize some points which may aid in establishing the correct diagnosis.

I. Diagnosis of Abdominal Conditions in Pediatrics:

The diagnosis of abdominal pathology in children is extremely difficult, as the subjective phase is absent. Children are unable to localize pain well. Goldbloom[1] has written about the different abdominal pains which occur in cases of pneumonia, pericarditis,

pleural effusions and throat infections. Of the latter he writes that pain is the first outstanding symptom. There is rarely any tenderness, never any rigidity, and the abdominal pain subsides well before signs in the throat subside. He further explains that pain occurs after the onset and after the complete subsidence of the throat infection. The pain is more marked than the tenderness or the rigidity.

It is well to remember that an examination of a child's abdomen must always be done with warm hands.

Thorndike[2] calls attention to the necessity of listening carefully to the parent's story, rearranging the details carefully in chronological order.

II. Diagnosis of Abdominal Conditions in Adults:

If generalized aching over the body ushers in the present complaint, the pathology is not usually in the abdomen.

A. Differential Diagnosis of Extra-abdominal Conditions: 1. Pneumonias may confuse the surgeon. Always do a complete physical examination. If there are suppression of breath sounds and a few rales, followed later by tubular breathing and dullness, take an x-ray of the chest. The facies of a patient with pneumonia is helpful in making a diagnosis especially if herpes is present.

2. Tabetic crises. Argyll–Robertson pupils noted in the course of a complete examination, should alone be enough to caution the surgeon to be on his guard. He should look for further findings of lues to either support or rule out this possibility.

3. Poisonings — plus heavy metals. The complete history and examination, especially the lead line on the gums in the case of lead poisoning.

4. Angina pectoris and coronary thrombosis. The history is important. Do a complete examination.

5. Influenza. The history will help. The course is short. One finds a relative leukopenia or absence of leukocytosis. There is an absence of rigidity in the presence of tenderness in the region of the appendix.

6. In cases of typhoid fever, the complaint begins with a chill; whereas appendicitis starts with pain. It is well to remember that if there is a generalized aching, the pathology is not usually in the abdomen.

7. Subcostal neuritis, according to Clinton[3], is due to traumatic injury to nerve trunk. The 11th and 12th intercostal nerves are subject to trauma due to repeated squeezing of the nerve between the tips of the ribs and the wing of the pelvis. It is seen in short-waisted persons or in those who have unusually long 11th and 12th ribs. "Toothache" type of pain with no relation to the gastro-intestinal tract. There is pain on bending in the morning. Wochsmuth[4] states, that: "Interruption of nerve conduction by injecting an anesthetic solution in the axillary line from the 8th rib to the crest of the ileum results in complete anaesthesia of abdominal wall below the umbilicus. This would cause disappearance of spontaneous pains and tenderness within abdominal wall itself but would not affect symptoms due to conditions within the abdominal cavity. The splanchnic nerve conducts pain of appendicitis, also rami communicantes so that the anaesthetic effect can be obtained in appendicitis only by means of paravertebral interruption of the rami communicantes. The latter procedure also has been used for diagnostic purposes. In patients with acute appendicitis given the above test, it is found that abdominal rigidity and tenderness persist".

B. Differential Diagnosis of Intra-abdominal Conditions: Franke[5] has described a method of distinguishing nerve pains from pains due to appendicitis or gastric ulcer. He folds and pinches the skin of the abdominal wall in the region in question. He writes: "In patients with marked adiposis in which it is impossible to fold the skin, especially over the stomach, the patient is made to raise his trunk in the semi-sitting position. One can then fold the skin. If sensitiveness on pressure is present, it is in the skin, as the pressure does not reach the organs under the tense muscles. In these cases it is usually the entire area of a nerve which is painful. In gastric ulcer, cholecystitis or appendicitis, the painful points are circumscribed".

Burgess[6] has employed a good classification of acute abdominal conditions. He divides these into four groups:

1. Colics, which are characterized by:
   (a) Sudden onset of pain.
   (b) Sudden cessation of pain.
   (c) Tendency for pain to recur.
2. Perforations:
   (a) Sudden onset of pain.
   (b) Severity of initial shock.
   (c) Masked involuntary rigidity from the very first.
   (d) Signs at times of free gas in the abdomen.
3. Inflammations:
   (a) Onset less sudden.
   (b) General symptoms of malaise.
4. Obstructions:
   (a) Persistence of vomiting.
   (b) Cessation of passage of flatus.
   (c) Progressive abdominal distention.

1. Acute abdominal lymphangitis may mislead the surgeon. This pathology accompanies those cases where there is a generalized hyperplasia of the lymphoid tissue, which is also found in the abdomen.

2. Mesenteric thrombosis and embolism occurs in patients usually over forty-five years of age. It is associated with low blood pressure and arteriosclerosis and is seen in patients who have been bed-ridden. The onset is very sudden with diffuse, colic-like pain which becomes persistent at a later time.

3. Splenic infarcts usually follow subacute bacterial endocarditis or other foci of infection. Petechiae, positive blood culture, and leukopenia help to diagnose this lesion. The pain is usually in the left upper abdominal quadrant.

4. Meckel's diverticulum usually carries the symptoms of appendicitis but is mostly left-sided.

5. Ruptured viscus. In this condition one may see a patient in shock. One can usually obtain a history from the relatives of some trauma, as a blow to the abdomen, or possibly, overexertion in some form or another. Excruciating pains, extreme rigidity, and disinclination of the patient to be moved are cardinal signs, if the patient is conscious. Plondke[7] states that: "It is important to remember that pain resulting from a lesion of viscus is not felt in that viscus but is referred to the peripheral distribution of the spinal nerves arising from those segments of the cord with which that viscus is connected through its sympathetic nerve supply".

6. Diverticulitis may mislead the surgeon. Bargen and Cox[8] have shown that multiple attacks of pain in the left lower quadrant of the abdomen, and finally acute pain, favored the diagnosis of a diverticulitis. The symptoms of perforation and fever, tending toward higher levels, also pointed to that lesion.

7. Acute pancreatitis. Narat[9] has called attention to the signs of a livid face and patches of grayish-blue color on the abdomen and thighs in this condition.

8. Gonorrheal infections. Always palpate Skene's ducts for thickening and also Bartholin's glands. The syndrome of a high leucocyte count (30,000), a toxic patient with a discharge and masses in the fornices—usually means gonorrhoea.

9. Ectopic pregnancy. A good history is essential because ectopic pregnancies usually burst between the 8th and 12th week. A period of amenorrhea is usually present with some spotting. A viscus has ruptured, so one must expect shock.

10. Pyelitis. Here chills and rigors are common. This is not very common in cases of acute appendicitis. Urinary symptoms and examination will aid in the diagnosis.

11. Renal colic. There is referred pain (sharp and stabbing) down in the scrotum or thigh. In these cases a pyelogram and a flat plate are necessary adjuncts in making a diagnosis. Remember that kidney pain is usually steady in character, but a ureteral pain is intermittent. The only continuous pain which occurs in the abdomen is the pain of anoxemia. An important adjunct in the above diagnosis, which could be used more extensively than it is at the present time, is the sedimentation test.[10]

SUMMARY

In summing up these statements, let me quote Urban Maes[11] who writes: "In mak-

ing a diagnosis, the following points should be considered: age, sex, time of onset, facies and decubitus, variations in pulse, temperature and respiration, blood count and urinalysis, and, most important of all, a carefully interpreted history. Diagnosis by exclusion if possible if all other methods fail. Surgery is indicated in most acute intra-abdominal diseases. Purgation is never indicated, nor is the administration of opiates until after the exact diagnosis is established. Exploratory laparotomy is justifiable in the cases in which an exact diagnosis cannot be made".

It is evident from this brief presentation of my theme that the surgeon is confronted with grave responsibilities in surgery of the abdomen. If one is to avoid the errors of omission and commission prolonged special training in this field of surgery is necessary. It is also quite evident that a perfect mastery of the basic sciences combined with a profound knowledge of medicine and surgery is likewise essential.

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DISCUSSION

Dr. Eugene S. Sullivan (Madison): Dr. Marshall is to be commended on this very excellent paper. It takes courage to publicly acknowledge errors, and we should all be very appreciative of efforts of this kind, directed toward the improvement of medical practice and the safety of the doctor.

The greatest field for errors lies in the preoperative diagnosis and Dr. Marshall has well stressed the necessity for a careful history and complete physical examination. No doubt, all of you can recall mistakes that have been occasioned by failure to properly investigate the patient before operation.

Errors which arise from inadequate or careless history and examination are more culpable than those which occur as a result of faulty judgment. Another phase of this subject concerns the legal pitfalls, due to attempts at legal reprisal for alleged acts of negligence, which are becoming much more frequent.

Failure to have consent from the proper relative before operations on minors has proven costly to many surgeons; likewise the removal of a normal appendix, where the preoperative discussion has concerned itself only with the removal or repair of one or the other abdominal or pelvic viscera.

Crafty, unfriendly attorneys have actually been able to make mountains out of molehills for many sincere, hard working surgeons. Honesty and frankness in dealing with the patient and his relatives is of paramount importance, and is the best safeguard and protection against disputes. By informing those most concerned of any appreciable error which may have occurred in the management of a surgical case, one is somewhat protected against adverse comments made by another doctor, the type who enjoys his competitor's misfortune.

Complete honesty, frankness in all dealings with patients and relatives removes the surprise element, which is so provocative of malpractice actions.

FIRST DISTRICT MEETING

A symposium on the etiology, symptoms, diagnosis and treatment of cardiac diseases opened by Dr. F. D. Murphy, Marquette University School of Medicine, is the feature of the First Councilor District meeting at Watertown on Thursday, October 24th. All members in good standing of the State Medical Society of Wisconsin are invited to attend this meeting.

The meeting will be opened at three o'clock, Thursday afternoon, the 24th, in the Elks Club Rooms at Watertown. The symposium on cardiac diseases will be held at that time followed by a dinner and short evening program at six-thirty.

Dr. H. P. Bowen, Watertown, is President of the District and Dr. J. Francis Wilkinson, Oconomowoc, is Secretary.

Carcinoma of the Colon*

By F. A. STRATTON M. D.
Milwaukee

IT IS quite generally recognized that cancer of the colon is one of the most curable of internal cancers, providing a proper type of operation can be performed reasonably early in the disease.

The reason for its amenability to treatment is the fact that as a rule it grows slowly, and that metastasis, both regional and remote, is late in occurring.

The latter fact has been shown by the observation of many surgeons that in cases explored the incidence of metastasis is less than forty per cent. In a report of one hundred and eighteen autopsies on patients who had died of complications of cancer of the bowel, metastasis was entirely absent in forty per cent, and in four per cent of these metastasis was regional and accessible for surgical removal.

In operable cases, seen reasonably early where the proper type of operation is done, the results are gratifying, a large percentage remaining well for three or more years.

In spite of these facts, which appear to be quite generally known, about forty per cent of cancers of the large bowel are inoperable when first seen by the surgeon, many of them having developed complications such as acute obstruction, perforation with peritonitis, localized abscess or severe hemorrhage before the ailment has been considered serious, in spite of the fact that many times they have been under treatment for many months without a proper investigation having been made.

These unfortunate circumstances are understandable when we consider that the early symptoms are mild and insidious and simulate many other gastro-intestinal and general conditions.

Serious pathological changes may be present while the symptoms are still of a rather insignificant character and may be entirely overlooked unless the physician realizes the possibilities and is on the alert to look for signs of cancer and make a thorough investigation. Delay is by no means always the fault of the physician, as in many instances he is first consulted for signs of acute obstruction, the presence of a tumor, or severe hemorrhage or anemia, all indicating a rather advanced stage of the disease.

It should not be necessary to repeat here that when the diagnosis of cancer of the bowel, or for that matter cancer in any location, becomes obvious, the disease is usually beyond the reach of the surgeon.

It is certain that if we hope to increase the percentage of cures our efforts must be directed toward improving our methods of diagnosis, always realizing the possibility of this lesion no matter how vague the symptoms, and making early use of the sigmoidoscope, the x-ray and other modern methods of investigation. We must also bear in mind the fact that x-ray examinations fail to disclose cancer of the bowel when it is present in as high as twenty per cent of cases, and we must make use of the exploratory operation when the symptoms are suggestive, even in the absence of positive x-ray findings.

Cancer of the colon occurs most frequently in the fifth or sixth decades although there are authenticated cases occurring much earlier in life, even in early youth. The incidence seems to be greater in men.

The tumors which are usually single, although multiple cancers are not uncommon, vary from a rather cellular growth on the one hand, to the scirrhus type with marked connective tissue reaction on the other. The degree of connective tissue reaction is extremely variable. In the cellular type the tumors attain considerable size and are prone to extend into the lumen and undergo early ulceration with resulting hemorrhage. The scirrhus type produces a tubular or annular constriction of the bowel causing early obstruction.

The tumors may grow by expansion or infiltration of the lymphatics. Depending

* Presented before 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, September 1934.

upon whether the infiltration involves the perpendicular or horizontal lymphatics between the several coats of the bowel, the resulting constriction will be annular or tubular. Usually there is a combination of both.

The tumors grow slowly and are usually quite circumscribed with a definite line of demarcation between the growth and the healthy bowel. The tumor cells permeate the coats of the bowel until the serosa is reached, when the connective tissue reaction becomes manifest in the formation of adhesions. The cells then permeate the lymphatics of the mesentery, and metastases in the regional glands occur.

THREE TYPES

According to McGlannan, histologically, carcinoma of the colon occurs in three varieties, according to the types of epithelial cells and their arrangement.

In the first or least malignant type, the cell is cylindrical and approaches very closely the normal cell, and the glandular arrangement is preserved in the original tumor and its metastases. Marked connective tissue reaction forms a barrier between the tumor and healthy tissue and sends trabeculae into the growth. In the second type proliferation of epithelium tends to form solid tubes and the cell changes from the cylindrical to the cuboidal form. The connective tissue reaction is slight and the cells quickly permeate the bowel wall and form widespread metastases to regional glands and distant organs. The third type is the end product of the first two. The cells are flat or polygonal and are found in solid masses with very scanty fibrous stroma. In this type metastases occur early and make prognosis practically hopeless.

Tumors in which there occur goblet cells secreting gelatinous material (gelatinous carcinoma) while slow in producing metastases have a tendency to recur locally following operation.

Carcinoma is said to develop in benign polypi or polypi may be malignant from the beginning. The cecum and sigmoid are the most common sites of carcinoma, the incidence being about the same in each. The next frequent sites are the hepatic and splenic flexures, the transverse descending and ascending colon, in the order named.

The tumor rarely causes obstruction in the cecum, probably because of the large size of the bowel in this region, the nature of the growth, and the soft or liquid fecal content. Hemorrhage, however, is of frequent occurrence and marked anemia, with or without bleeding, is a common symptom. Large tumors occur frequently in this location.

Obstruction is common in other parts of the colon, from annular or tubular growths. When obstruction begins, there is usually a change in the bowel above the growth varying from a moderate hypertrophy of the muscle of the bowel to a marked dilatation and thinning of the bowel.

There is always more or less edema present, and acute obstruction is almost always caused by inflammation with a sudden increase in edema, so that in some cases, where the obstruction suddenly becomes acute, the disease is not necessarily far advanced.

Ulceration may occur in any type of growth, although more common in the cellular type. Bleeding is usually not severe. In some cases perforation occurs, with diffuse feco-purulent peritonitis, or where the process is walled off, localized abscess.

Marked toxemia with loss of appetite, weight and strength is not always a late development and occurs as a result of chronic obstruction or disturbance of motility. Profound anemia with or without hemorrhage may be the only outstanding symptom in some cases, especially growths in the cecum.

Symptoms are not characteristic or typical in the early stage. Mild lower abdominal distress or soreness, slight colic, diarrhea or constipation or any departure from the normal bowel functions, especially in individuals over forty years of age, should excite the suspicion of the physician and lead him to conduct a careful examination.

The presence in the stool of pus or blood, whether gross or miscroscopic, should not be dismissed without the most searching investigation. If repeated observations are positive and x-ray and proctoscopic examination are negative, it is the part of wisdom to resort to exploratory operation.

The symptoms of cancer in the right half of the colon may be classified under five main groups in their early stages.

1. Dyspepsia, with few localized symptoms of pain, often suspected of being due to gallbladder, appendix, urological, or other disease.
2. Profound anemia and cachexia, with or without visible loss of blood in the stool.
3. Mass in the right lower quadrant with impoverished health and insidious progressive onset.
4. Normal bowel movements, but with a tendency toward constipation or diarrhea—also pus and blood in the stool on microscopic examination.
5. Atypical localized pains and tenderness.

In the left half of the colon the following symptoms may be found.

1. Obstruction and interference with motility in all its different grades.
2. Scirrhus carcinoma, and malignant polypi occur frequently, which tend to encircle or obstruct the lumen of the bowel producing slow and progressive stenosis.
3. Palpable tumor—absent or late.
4. Pus and blood in the stool.
5. Subacute and chronic perforations in neglected cases, and regional lymphatic metastases.

Laboratory examinations consist of blood count, to determine the presence of secondary anemia from toxemia or loss of blood, examination of feces for blood pus and mucus, x-ray examinations after opaque enema. Barium meal should not be used, as partial obstructions are often made complete after its ingestion. Fluoroscopic examination in addition to films should be employed. The typical picture shows stenosis, distortion and filling defects. Procto-sigmoidoscopic examination may reveal growths low in the sigmoid.

TREATMENT

The treatment of cancer of the colon consists in resection of the involved segment of bowel, and it is generally believed that extensive resection is not necessary. Complete removal of the involved portion is sufficient. The prognosis depends upon the presence of metastases, and the ability of the patient to bear a rather extensive operation. In cancer of the right side of the colon the operation may be safely done in one stage in some cases, although preliminary ileocolostomy, with removal of the growth as a second stage procedure, is safer as a routine. Growths involving the transverse, descending colon and sigmoid are more safely treated by multiple stage operations of the Mikulicz type.

Preoperative treatment is of the greatest importance particularly in obstructive cases. Briefly it consists in: (1) Decompression of the bowel. (2) Restoration of fluids. (3) General rehabilitation. Although surgical decompression is usually necessary in cases with acute obstruction, in occasional cases the duodenal suction siphonage may be employed with very satisfactory results. Frequently the obstruction will be relieved by this treatment, and, if not, cecostomy may be performed. In chronically obstructed cases decompression may be carried out by mild purgation and irrigation. The patient should be given large amounts of fluids including fruit juices and a high caloric diet. Rankin, in a recent article, has pointed out the value of blood transfusions as an aid to rehabilitation and has also stressed the value of intra-peritoneal vaccination as a preventive of postoperative peritonitis.

Detailed consideration of operative procedure has been omitted from this paper because I feel that it is much more important to stress: (1) The curability of intestinal cancer. (2) The fact that over fifty per cent of cases are presented to the surgeon too late for successful intervention and (3) The necessity for greater vigilance in the diagnosis of early cases.

DISCUSSION

Dr. W. J. Tucker (Ashland): Dr. Stratton has successfully managed to cover this large subject in the short space of time allotted to him. He has been forced to deal rather superficially with some of the most important phases of this subject. As I see it, this question of large bowel carcinoma is of extreme importance from the standpoint of diagnosis as well as treatment. Carcinoma of the large bowel comprises one-third of all the cancers in man; two-thirds of this total lying in the lower end of the

(Continued on page 786)

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OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN

« « « EDITORIALS » » »

The County Secretary

EVERY member should appreciate the responsibility that is assumed by the one that accepts the position as Secretary of his County Medical Society. That some members do appreciate the responsibilities attached to the position is evidenced by the numerous refusals of this office at election time.

The title indicates but a small fraction of the duties usually delegated to the Secretary. The only visual evidence of his efforts is the reading of the minutes of the previous meeting. Behind the scenes, however, there are many other duties that escape the notice of the average member. In many Societies, the Secretary arranges the meeting place, banquet, program and accommodations for the guest speakers. It frequently happens that the material to be presented by the speaker necessitates the use of a stereopticon—again it is the Secretary that must secure it. The office carries with it the membership on many committees of the Society that require his attendance. It is the duty of the Secretary to maintain frequent contact with the State Society and the American Medical Association. In some societies it has become the custom to combine the position of secretary with that of the treasurer. When the two positions are combined it necessitates the keeping of an accurate record of the income and disbursements of the Society—just another one of those duties which the Secretary carries out with a smile.

Finally, it falls upon him to collect the dues. Now collections usually bring an attack of the "jitters" to every physician. In addition to the Secretary's collection in his private practice, he has the double duty of collecting the Society dues. At best, your Secretary dislikes the task, just as you do in private practice. You can make the Secretary's load just a little lighter if you will pay your dues when you receive the first statement from him. Save your Secretary the additional work of sending out repeated statements.

Remember your Secretary is doing this for you—for nothing. Be considerate of him. Your prompt payment of dues to your Secretary will be appreciated also by the officers of the State Society. Their plans hinge upon your promptness.

In the elections this fall, we trust that all societies will select outstanding men for this office,—and then will help them in every way that they can.

LIBRARY COLLEGE OF

RALPH M. CARTER, M. D.
President, State Medical Society of Wisconsin, 1936

Dr. Ralph M. Carter of Green Bay was born in 1884 at Decatur, Illinois. His preliminary education was obtained in the public schools of Decatur; he received his A. B. degree from the University of Illinois in 1905, and his M. D. from Rush Medical College in 1908. He served an internship in Cook County Hospital, Chicago, from 1908 to 1910, and in the latter year began general practice in Green Bay.

For a number of years past, he has limited his work exclusively to orthopedics and industrial surgery. At the present time, Dr. Carter is attending surgeon to St. Mary's, St. Vincent's, and the Bellin Memorial Hospitals; he is local surgeon for the Milwaukee, the Chicago & Northwestern, and the Green Bay and Western railroads. He is Past President of the Brown-Kewaunee County Medical Society and the Green Bay Academy of Medicine; a member of the Wisconsin Surgical Club, the Western Surgical Association, the American Academy of Orthopedic Surgeons, the Clinical Orthopedic Society, and is on the Board of Governors of the Central States Society of Industrial Medicine and Surgery. He is a Fellow of the American College of Surgeons.

THE
OF PHYSICIANS
PHILADELPHIA

Society Proceedings

CHIPPEWA

A meeting of the Chippewa County Medical Society was held on September 25th at Hotel Northern, Chippewa Falls. The following program was presented:

"Cardiac Lesions and Their Treatment" by Dr. Albert Bryan, Madison.

"Injuries and Diseases of the Knee Joint" by Dr. Jerome T. Jerome, Madison.

DANE

The regular monthly meeting of the Dane County Medical Society was held at Lake Ripley, Cambridge, on Tuesday, Sepetember third. It was the annual golf meeting and the President's Trophy was awarded to Dr. Stuart A. McCormick of Madison. Other golf awards went to Dr. Herbert Virgin and Dr. Homer Carter of Madison and Dr. Karl K. Amundson of Cambridge.

Dr. J. Newton Sisk of Madison was elected delegate to the 1935 meeting of the State Medical Society and Dr. M. J. J. Coluccy of Madison was chosen alternate.

Drs. Jerome T. Jerome and Kenneth Lemmer were elected to membership in the Society.

The speaker of the evening was Mr. J. G. Crownhart, secretary of the State Society, who spoke on "Medical Problems". A general discussion followed. N. T.

PORTAGE

The Portage County Medical Society had a dinner meeting at Archie's Cafe near Stevens Point, the night of August 20th.

Following a steak dinner, the meeting adjourned to the Hotel Whiting, where a talk was given by Dr. John E. Gonce of Madison. He talked on "Infant Feeding Problems in General Practice."

An extensive business session followed the formal program. E. E. K.

NINTH COUNCILOR

The summer meeting of the Ninth Councilor District Medical Society was held at Wisconsin Rapids on August 28th. The following program was presented.

"Complete Avulsion of the Scalp" by Dr. W. F. Wilker of Iola.

"The Incidence of Allergy in Etiology of Nasal Polyps" by Dr. J. K. Trumbo, Wausau.

"The Relationship of Pathology to the Practice of Medicine" by Dr. Norbert Enzer, Milwaukee.

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Three Hundred Thirty-One Attend Largest Auxiliary Meeting

THE Milwaukee Meeting—what a pleasant one it was! It was, truly, a most delightful meeting and will live long in the memories of those who were fortunate enough to be there. Aside from the pleasant hours we spent socially, we had a fine meeting, and a good attendance. With 331 in attendance at the 7th Annual Meeting of the Auxiliary in Milwaukee, September 17–19, a new record was set for the Auxiliary meetings.

The General Convention Chairman, Mrs. Louis M. Warfield, Milwaukee, and her Vice-Chairman, Mrs. Julius H. Sure, Milwaukee, and the following Convention Committee worked faithfully to make the meeting a success,—Mrs. Francis Janney, Mrs. Arthur

AUXILIARY REGISTRATION

7th Annual Meeting, Milwaukee, Wis.

Sept. 17, 18, 19, 1935

Mrs. Oscar W. Friske, Beloit, Chairman

	Tuesday Sept. 17	Wednesday Sept. 18	Thursday Sept. 19	Total
Executive Board	12	11	1	24
Delegates	5	11	3	19
Alternates	3	13	1	17
Members	92	93	41	226
Guests	8	28	9	45
	120	156	55	331

One hundred thirty-two out-of-town ladies registered and one hundred ninety-nine Milwaukee women registered.

Grob, Mrs. William Liefert, Mrs. H. O. Zurheide, Mrs. Otto H. Foerster, Mrs. Oscar W. Friske, Beloit; Mrs. Raymond Schowalter, Mrs. John J. O'Hara, Mrs. Harold J. Cannon, Mrs. Robert G. Washburn, Mrs. G. I. Hogue, Mrs. J. Gurney Taylor, Mrs. Fredk. C. Heidner, Mrs. Arno J. Langjahr, Mrs. Thos. A. Judge, Mrs. Harry M. Hawkins, Mrs. Robert McDonald, Mrs. Wm. M. Jermain, Mrs. Edwin P. Bickler, Mrs. John Foster McNary, Mrs. Norbert Enzer, Mrs. Henry Gramling, Mrs. C. A. Harper, Madison, Mrs. Wm. Kradwell and Mrs. Wilson W. Hume.

The President of the Hostess Auxiliary, Mrs. Harry J. Heeb, Milwaukee, and members of the Milwaukee Auxiliary did all in their power to make the meeting pleasant and extended hospitality to all.

Hotel Schroeder, Milwaukee, served as the Headquarters for the meeting and the management was very generous with space for Registration, Exhibits, Board Meetings, and the Banquet Room for the General Sessions.

We found that the members of the hostess Auxiliary were tireless in making our stay a pleasant one, so that we were very reluctant to leave when our meeting closed. The Auxiliary members and visitors feel very much indebted to the Milwaukee Auxiliary women for all their courtesies.

To the out-going President, Mrs. Rock Sleyster, Wauwatosa, the Auxiliary owes a deep debt of gratitude; also to the Officers, State Chairmen, and other members of the Executive Board for their unselfish way of handling the past year's work. Mrs. Sleyster's ability to serve the Auxiliary so well was governed largely by her own wholehearted active cooperation and constructive counsel. R. B. N.

Proceedings of Seventh Annual Meeting of the Woman's Auxiliary to the State Medical Society of Wisconsin, Milwaukee, Sept. 17-19

THE Seventh Annual Meeting of the Woman's Auxiliary to the State Medical Society of Wisconsin opened at 1 P.M. Tuesday, September 17, 1935, at the Schroeder Hotel, Milwaukee, with registration in the lobby.

Pre-Convention Board Meeting

A dinner meeting of the Executive Board of the Woman's Auxiliary to the State Medical Society of Wisconsin was held in the Banquet Room of the Schroeder Hotel, Milwaukee, on Tuesday evening, September 17, 1935. Thirty-three were in attendance at the dinner. Honor guests on this happy occasion were Mrs. Robert E. Fitzgerald, Wauwatosa, National President-Elect; Mrs. Eben J. Carey, Milwaukee, National Treasurer, and Dr. Mina Glasier of Bloomington, Wisconsin. These guests inspired the members with a new zeal for Auxiliary work.

During the dinner a group from the International Opera Chorus presented a delightful musical program.

The minutes of the mid-year Board meeting were read by the Secretary, Mrs. George Ewell, Madison, and stood approved.

A message of greetings from the National Program Chairman, Mrs. V. E. Holcombe, West Virginia, was read by the Secretary.

Copies of the following mimeographed lists were presented to the members of the Board:

(a) Membership Report—January 1 to September 16, 1935. (The paid membership to date for the fiscal year is 824)
(b) List of Officers and Chairmen of the 19 county auxiliaries. (Each of the county auxiliaries hold elections at the close of the fiscal-calendar year.)
(c) Statement of Receipts and Disbursements from January 1, to September 16, 1935.

A motion carried that the treasurer's report be accepted. (A copy of the statement of receipts and disbursements is attached to the minutes.)

Reports were given by the following state chairmen:

1. Mrs. F. Gregory Connell, Oshkosh, Chairman of Public Relations.
2. Mrs. Oscar W. Friske, Beloit, Program Chairman.
3. Mrs. Irwin Schulz, Wauwatosa, Hygeia Chairman.
4. Mrs. Eben J. Carey, Milwaukee, Organization Chairman.
5. Mrs. C. A. Harper, Madison, Chairman of Archives and Historian.
6. Mrs. Theodore J. Gunther, Sheboygan, Chairman of Press and Publicity.

On motion these reports were received and filed.

The President appointed Mrs. Frank W. Pope, Racine, Chairman of Resolutions for the Annual Meeting.

It was moved and seconded that a message of condolence be sent to Mrs. Charles R. Bardeen, Madison, Past-President of the State Auxiliary, September 1930 to September 1931.

The Secretary read a letter received from the Secretary of the Douglas County Auxiliary relative to advertising of patent medicines in prominent women's magazines. (A copy of the letter is attached to the minutes.)

The motion carried that the letter from the Auxiliary to the Douglas County Medical Society be referred to the Advisory Council of the State Auxiliary.

A rising vote of thanks was given to Ruth Buellesbach Naset who served as Executive Secretary since 1931.

Adjourned 10:30 P.M.

Minutes of the Annual Meeting

First Session

The first session of the general meeting of the Seventh Annual Meeting of the Woman's Auxiliary to the State Medical Society was called to order in the Banquet Room of the Schroeder Hotel, Milwaukee, on Wednesday, September 18th at 10:10 A.M., by the president, Mrs. Rock Sleyster. A quorum was present. One hundred members were seated at the opening session.

The invocation was offered by Rabbi Samuel Hirshberg of Milwaukee. The Address of Welcome was given by Mrs. Harry J. Heeb, Milwaukee, President of the hostess Auxiliary. The response was made by Mrs. Arthur J. McCarey, Green Bay, President-Elect of Brown-Kewaunee-Door Auxiliary. Mrs. McCarey served as the General Chairman of the Annual Meeting in Green Bay last year.

In memoriam all stood with bowed heads in honor of our departed members as their names were called.

Mrs. Louis M. Warfield, Milwaukee, Chairman of the Annual Meeting, gave a report with announcements for the day.

The President-Elect of the Auxiliary to the American Medical Association, Mrs. Robert E. Fitzgerald, Wauwatosa, greeted the assembly.

The minutes of the Sixth Annual Meeting were given by the Secretary, Mrs. George Ewell, Madison, and stood approved as read.

The Secretary took the chair and the president gave her report. The report was graciously received and favorably commended.

Roll call by the Executive Secretary showed that eighteen (18) county auxiliaries were represented. Reports were made by the Presidents or Delegates. The 19th county auxiliary, Grant County, organized less than two months ago, had no report.

The reports of the following 12 county auxiliaries were read by the presidents: Columbia, Dane, Dodge, Green Lake-Waushara-Adams, Kenosha, Marinette-Florence, Milwaukee, Racine, Rock, Sheboygan, Waukesha, and Winnebago.

The reports of the following 6 county auxiliaries were read by authorized delegates: Brown-Kewaunee-Door, Douglas, Manitowoc, Outagamie, Polk and Portage.

Mrs. Oscar Friske, Beloit, Chairman of Registration, reported a registration of 208 at 11 o'clock Wednesday; 21 Executive Board; 17 delegates; 15 alternates; 137 members, and 18 guests.

The meeting adjourned at 11:30 A.M.

Luncheon Program

Two hundred twenty five (225) ladies enjoyed a delectable luncheon on Wednesday at 12:30 o'clock, September 18, 1935, in the main dining room of the Hotel Schroeder. The orchestral program was furnished by Ben Pollack's Orchestra. Through the courtesy of Hixons' Dress Shop, a lovely style show was presented. Mrs. Fredk. C. Heidner, Milwaukee, was Chairman of the Style Show. Members of the Milwaukee Auxiliary who served as models in the fashion display were Mmes. J. Gurney Taylor, Norbert Enzer, Robert McDonald, T. H. Rolfs, John McCabe, and Wm. Jermain.

The trip to the Museum and Art Institute and the tour to the County Institutions were outstanding features of the afternoon. The tour to the

County Institutions was followed by a tea at the Nurses' home, given by wives of the staff members of the Milwaukee County Hospital. About 75 women were served.

Evening Musical

On Wednesday evening at 8:30 o'clock five members of the Milwaukee Auxiliary provided a musical program. This musical was complimentary and was held in the Banquet Room of the Schroeder Hotel. The program was presented by Lorna Warfield, and Marie Herron Truitt, sopranos; Ruth Perssion Lieberman, violinist; Florence Bettry Kelly, pianist and accompanist, and Beatrice Rueth, accompanist.

Minutes of the Annual Meeting

Second Session

The Second Session of the General Business Meeting of the Seventh Annual Meeting of the Woman's Auxiliary to the State Medical Society of Wisconsin was held in the Banquet Room of the Schroeder Hotel, at 10:10 A.M. Thursday, September 19, 1935. The President, Mrs. Rock Sleyster, Wauwatosa, presided. A quorum was present.

The minutes of the first session of the 7th Annual Meeting were read by the Secretary, Mrs. George Ewell, Madison, and stood approved.

Mrs. Louis M. Warfield, Milwaukee, General Convention Chairman, made announcements for the day.

The Report of the Resolutions Committee was presented by the Chairman, Mrs. Frank W. Pope, Racine.

The Report of the Nominating Committee was presented by Mrs. J. Gurney Taylor, Milwaukee, Chairman. Nominations from the floor were called for. None were offered. A motion carried that the Secretary cast the ballot, whereupon the following were declared elected unanimously:

President-Elect—Mrs. C. A. Harper, Madison
Secretary—Mrs. Theodore Gunther, Sheboygan
Treasurer—Mrs. Frank W. Pope, Racine

The newly elected officers were called to the rostrum.

The President for the coming year was installed when Mrs. Rock Sleyster, Wauwatosa, with well-chosen words, presented the gavel to Mrs. F. Gregory Connell, Oshkosh, President-Elect. This she graciously accepted.

The hostess Auxiliary, Milwaukee County, presented gardenia corsages to the out-going President, Mrs. Sleyster, and to the in-coming President, Mrs. Connell.

The President gave her Inaugural Address with the Secretary in the chair.

The Chairman of Registration, Mrs. Oscar Friske, Beloit, presented her report.

The Speaker of the occasion, Dr. Edward H. Cary, Dallas, Texas, was escorted to the platform by Dr. Rock Sleyster, Wauwatosa, chairman of the Board of Trustees of the American Medical Association. Dr. Cary, Past-President of the American Medical Association, was introduced by the President.

Adjourned at 12 o'clock noon.

Luncheon and Bridge Party

A luncheon at the Wisconsin Club, Milwaukee, at 1:00 P.M., Thursday, September 19th, was enjoyed by one hundred forty-eight (148) ladies. Following the luncheon both auction and contract bridge were played. Beautiful table and door prizes were given by the hostess Auxiliary. The delightful party was under the direction of Mrs. J. Gurney Taylor, Milwaukee.

Post-Convention Board Meeting

The Post-Convention Board Meeting of the Woman's Auxiliary to the State Medical Society was held on the fifth floor of the Schroeder Hotel, on Thursday, September 19, 1935, at 3:50 P.M. The President, Mrs. F. Gregory Connell, Oshkosh, presided. A quorum was present.

The minutes of the Pre-Convention Board meeting were read by the Secretary, Mrs. T. J. Gunther, Sheboygan, and stood approved.

The Auditor's report for the years 1932, 1933 and 1934 were read by the Treasurer, Mrs. Frank W. Pope, Racine. The Treasurer's report was read and accepted.

Announcement of State Chairmen for the ensuing year was made by the President,—

Public Relations—Mrs. Arthur J. Wiesender, Berlin
Program—Mrs. Ralph M. Carter, Green Bay
Hygeia—Mrs. Harold M. Coon, Stevens Point
Organization—Mrs. Arthur Sullivan, Madison
Archives & Historian—Mrs. C. A. Harper, Madison
Press and Publicity—Mrs. Earle F. McGrath, Appleton.
Parliamentarian—Mrs. Robert E. Fitzgerald, Wauwatosa

Mrs. Arthur J. McCarey, Green Bay, was appointed Chairman of the Nominating Committee and the members and alternates of the Committee were elected as follows:

Members of Nominating Committee

1. Mrs. Thomas F. Shinnick, Beloit
2. Mrs. Eben J. Carey, Milwaukee
3. Mrs. Frank E. Brinckerhoff, Beloit
4. Mrs. Emile George Nadeau, Green Bay
5. Mrs. Frederic L. Grover, Hartland

Alternates of Nominating Committee

1. Mrs. Fred A. Nause, Jr., Sheboygan
2. Mrs. Harry J. Heeb, Milwaukee
3. Mrs. Paul A. Fox, Beloit
4. Mrs. Andrew S. Pfeiffer, Racine
5. Mrs. John Wilkinson, Oconomowoc

A vote of thanks was given the Chairman of the Convention Committee; also the President of the hostess Auxiliary, and members of the Convention Committee.

Annual Dinner and Dance

Thursday evening, September 19th, the program of the Auxiliary came to a close with the annual dinner for the doctors and their wives in the Crystal Ballroom of the Schroeder Hotel.

The Milwaukee Auxiliary did all in their power to make our stay pleasant and profitable.

"The year is closed, the record made,
The last deed done, the last word said.
The memory, alone, remains
Of all its joys, its griefs, its gains.
And, now, with purpose full and clear,
We turn to meet another year."

FROM THE COUNTIES

By Mrs. T. J. Gunther, Sheboygan
Chairman of Press and Publicity, September 1934–September 1935

Each of the 18 county auxiliaries in Wisconsin made a report of its work at the General Session on Wednesday, September 18, 1935. Twelve reports were given by County Presidents and six reports were given by authorized delegates. The 19th county auxiliary, Grant County, was organized July 25, 1935, and did not report.

1. Brown–Kewaunee–Door Auxiliary (Organized Nov. 1933)
   Present membership—54
   Outstanding work of this County was the entertainment of the State Auxiliary at its Sixth Annual Meeting in Green Bay, September 1934. They proved themselves a helpful Auxiliary indeed.

2. Columbia Auxiliary (Organized Jan. 1931)
   Present membership—12
   "Our Auxiliary is composed of members from a widely scattered area and we are not able to meet in any numbers as frequently as we would like. We believe the Auxiliary as a whole is able to accomplish a great deal and so we wish to give it our wholehearted support."

3. Dane Auxiliary (Organized May 1933)
   Present membership—62
   Two hundred twenty-five subscriptions to Hygeia for practically every school in Dane County was the achievement of the Auxiliary to the Dane County Medical Society in December 1934. Christmas cards were sent to each school together with the gift subscription.
   When the Mississippi Valley Tuberculosis Society convened in Madison, September 12–14, 1935, the Auxiliary committees offered transportation, decorated banquet tables from the blossoms of their own gardens, and opened the current year with a bridge-luncheon at the Maple Bluff Golf Club at which visiting ladies were guests.

4. Dodge Auxiliary (Organized May 1935)
   Present membership—13
   Dodge is a newly organized Auxiliary but chairmen have been appointed and the first regular meeting was held in September.

5. Douglas Auxiliary (Organized December 1933)
   Present membership—13
   Reviewed several books dealing with the Science of Medicine and its tributaries.

6. Grant Auxiliary (Organized July 1935)
   Present membership—18
   Chairmen have been appointed and the first regular meeting is being planned.

7. Green Lake–Waushara–Adams (Organized August 1930)
   Present membership—7
   "Our organization consists of seven members who reside in three different cities, the ratio being three, three and one. We have confined our efforts to studying medical problems, so far as they are related to public relations. At present we are engaged in collecting data on the past activities and history of our Auxiliary, this material to be assembled in scrap-book form."

8. Kenosha Auxiliary (Organized November 1932)
   Present membership—33
   "In this successful year, we have increased our membership; furnished layettes to deserving people, known as 'borderline cases'; provided entertainment for the children in our county institutions and reading matter for the adults. The Speakers' Bureau of the County Medical Society furnishes speakers for any organization desiring such service."

9. Manitowoc Auxiliary (Organized March 1933)
   Present membership—26
   At each meeting three-minute talks are given by members on various subjects taken from "The Auxiliary Page of the Wisconsin Medical Journal", "Hygeia", and "The Journal of The American Medical Association".
   During the year a bridge party was held and the proceeds used for Hygeia. At Christmas a party was held for the Doctors and their wives. In August a picnic was given for the Doctors and their families.

10. Marinette–Florence Auxiliary (Organized February 1930)
    Present membership—16
    Penny banks were placed in drug stores and restaurants,—the proceeds were used to place Hygeia in all high schools in the County. Proceeds obtained through a charity card party were turned over to the public health and clothing fund.

11. Milwaukee Auxiliary (Organized December 1931)
    Present membership—337
    The Hygeia Committee realized $525.00 from a White Elephant Sale. During their allotted time, the Hygeia Fund procured 604 8/12 yearly subscriptions, which helped place Wisconsin first in the National Hygeia Contest.
    The Flower and Courtesy Committee sponsored a benefit bridge in April with door prizes and a prize for each table. This party netted $44.00 for their fund, which is utilized for messages of congratulations, good wishes and condolences sent to members.
    Since last September, the Public Relations Committee has placed 100 speakers from the Medical Society Speakers' Bureau before lay organizations.
    The Social Committee deserves credit for the very successful and enjoyable dinner-dance held in May at which time 586 were present. The purpose of the affair was to promote closer friendships and good fellowship among the medical men, and the wives of physicians.
    Several groups of Auxiliary members rendered their assistance at various clinics during the Sixth Annual Diphtheria Prevention Campaign, sponsored by the Medical Society of Milwaukee County and the Health Department during the month of May.

12. Outagamie Auxiliary (Organized May 1934)
Present membership—32
The Auxiliary assisted the County Medical Society with publicity of a free lecture on "Cancer". Hygeia subscriptions were placed where the public can become familiar with it.

13. Polk Auxiliary (Organized July 1932)
Present membership—16
Polk County Auxiliary carried on an active Hygeia campaign and placed several subscriptions in schools.

14. Portage Auxiliary (Organized January 1933)
Present membership—20
The Auxiliary sponsored a very successful orthopedic clinic in conjunction with the County Medical Society.
Hygeia has been promoted in the city and county.
Wives of attorneys were guests at an Auxiliary luncheon.

15. Racine Auxiliary (Organized December 1932)
Present membership—48
The membership is approximately 100%—two eligible women remain to be added to the group. Thirty-nine subscriptions to Hygeia were obtained. Two open meetings were held and both were well attended. A Girl Scout Troup was organized. The Auxiliary has become interested in the county institutions.

16. Rock Auxiliary (Organized February 1930)
Present membership—29
Through the medium of civic and federated clubs and personal efforts on the part of members of the Public Relations Committee, the Auxiliary placed speakers in forty different lay groups. Several members of the County Medical Society graciously accepted the task of speaking.
The Philanthropic Committee with the cooperation of the Federated Women's Clubs and various church organizations was able to procure entertainment for Pinehurst Sanatorium which included concerts and playlets. At Christmas time the Auxiliary presented to Pinehurst a floor lamp and an electric popper. The Beloit Municipal Hospital was the recipient of a Christmas tree and trimmings for the children's ward and 150 glasses of jelly.
The Auxiliary purchased and placed 27 Hygeia subscriptions.

17. Sheboygan Auxiliary (Organized June 1932)
Present membership—23
Donations were given to the Sheboygan Vocational School, The Crippled Children's Class and Nursery, and Rocky Knoll Sanatorium, and the Auxiliary pledged their cooperation and support at all times. Thirty-two subscriptions to Hygeia were procured.

18. Waukesha Auxiliary (Organized April 1933)
Present membership—29
The Auxiliary to the Waukesha County Medical Society held two open meetings during the year and both were well attended. Members of the Auxiliary promoted Hygeia.

19. Winnebago Auxiliary (Organized April 1932)
Present membership—37
The Auxiliary to the Winnebago County Medical Society has a printed program, taking care of all the meetings of the year. The main project of the year was the placing of Hygeia in 97 county schools and three city schools. A successful card party was given to raise funds for Hygeia. The Auxiliary entertained its County Medical Society at dinner.

News Items and Personals

Dr. Walter P. Blount, Milwaukee, announces the removal of his offices to Suite 1410 Wells Building, 324 E. Wisconsin Avenue.

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Dr. and Mrs. Erwin C. Cary, Reedsville, celebrated their silver wedding anniversary on August third.

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Dr. J. C. Springberg of South Wayne, where he has practiced for the past four years, has sold it to Dr. E. W. Brott of Milwaukee.

Dr. Springberg left early in October for New York City where he will take postgraduate work at New York Polyclinic Medical School and Hospital.

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At the annual election of officers of the staff of Holy Family Hospital at Manitowoc, September 6th, the following officers were elected: President, Dr. E. C. Cary; Vice-president, Dr. Arthur Teitgen and Secretary, Dr. Charles E. Wall.

—△—

Dr. E. B. Pfefferkorn, Oshkosh, has been named to the faculty staff of Oshkosh State Teachers College as instructor in health education and physician for the college and training school.

Dr. L. J. Keenan of Fond du Lac has become associated with Drs. H. A. and J. C. Devine of Fond du Lac.

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Dr. A. A. Sinaiko of Stevens Point sailed from New York in early September for a trip around the world. He will spend some time in Paris, Vienna and the Holy Land before going to India where he will study eye diseases, and will return via Singapore, China and Japan. He expects to be gone a year.

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The following newly-licensed physicians have recently opened offices in Wisconsin:

Drs. Leon D. Sobush and Raymond G. Yost have opened joint offices for general practice at 918 Washington Street, Manitowoc.

Dr. Stephan A. Theisen will practice in Burlington with offices over the Burlington National Bank.

Dr. Joseph A. Rawlins is at Portage.

Dr. David J. Zubatsky is practicing at Twelfth and North Streets, Milwaukee.

Dr. Isadore I. Cash has opened offices at Two Rivers.

Dr. E. A. Addington of Dresser Junction has become associated with Dr. E. G. Nylander of Ellsworth.

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Dr. J. L. Rens, formerly of Weyerhauser, has opened an office in Phillips, Wisconsin.

—△—

Dr. Erich Wisiol of Stevens Point announced his association with Dr. W. C. Sheehan in September. Dr. Sheehan was formerly connected with the student health department of the University of Wisconsin and since January of this year has been on the staff of River Pines Sanatorium, Stevens Point.

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Dr. Vincent G. Springer has taken over the practice of Dr. Paul E. Craig of Winneconne who left for Philadelphia where he accepted a three-year fellowship in surgery at the University of Philadelphia which will be followed by a half year in goitre surgery at Berne, Switzerland.

Dr. Springer is a graduate of the University of Wisconsin Medical School and has interned at the Norwegian Deaconess Hospital in Chicago.

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Dr. Nelson A. Bonner, who has been associated with Dr. F. E. Turgasen of Manitowoc the past year, has opened his own office in the Huchthausen building, Manitowoc.

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The new clinic has just been completed for Dr. Frank C. Iber and his associates, Dr. W. A. Gramowski and Dr. Russell E. Pleune at Stevens Point.

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At the recent joint sessions of the Mississippi Valley Conference on Tuberculosis and the Mississippi Valley Sanatorium Association held in Madison, the following Wisconsin physicians were elected officers:

Dr. W. C. Reineking, Madison, was re-named secretary-treasurer of the Mississippi Valley Sanatorium Association, and the following were chosen officers of the Wisconsin Anti-Tuberculosis Association: Dr. William Snow Miller, Madison, President; Dr. Louis M. Warfield, Milwaukee, second vice-president; Dr. C. H. Stoddard, Milwaukee, recording secretary; Dr. J. Gurney Taylor of Milwaukee and Dr. Rock Sleyster, Wauwatosa, members of the executive committee; Dr. George Williamson, Neenah director for three years.

Members of the governing council of the Mississippi Valley Conference on Tuberculosis are Dr. Hoyt E. Dearholt, Milwaukee, and Dr. W. C. Reineking of Madison.

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A public testimonial dinner honoring Dr. T. W. Nuzum, 75, of Janesville for his fifty years of practice in that city was given on September 17th by the Civic and Industrial Council of that city and the Rock County Medical Society.

Dr. Morris Fishbein, editor of the Journal of the American Medical Association, was the principal speaker and had for his subject "Medical Progress of the Last Fifty Years."

The morning and afternoon programs were devoted to scientific papers which were presented by two sons of Dr. Nuzum,—Drs. John W., Chicago, and T. O., of Janesville. A paper prepared by another son, Dr. Franklin Nuzum of Santa Barbara, California, was read by Dr. T. O. Nuzum.

Three hundred and fifty persons attended the dinner.

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Dr. and Mrs. J. D. Nicholson of Milltown are on an automobile trip to Hamilton, Ontario, and on their return they plan to take a boat trip on the Mississippi River.

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Dr. J. S. Ackerman of Cudahy has returned from a six weeks' trip abroad.

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Mrs. W. E. Bannen, wife of Dr. W. E. Bannen of La Crosse, died on September 14th. Besides her husband, survivors are three sons and one daughter.

ENGAGEMENTS

Dr. Donald C. Wilkinson, Oconomowoc, to Miss Ruth H. Halloran of Des Moines, Iowa.

MARRIAGES

Dr. J. Francis Wilkinson, Oconomowoc, to Patricia Phelan Hebert on Wednesday, August 28th, at Clintonville.

DEATHS

Dr. William H. Melster, Milwaukee, died at his home on August 20th after an illness of several months.

He was born in the year 1884 and was a graduate of Northwestern University Medical School in the year 1906. He had been practicing in Milwaukee since that time.

Dr. Melster was a member of the Medical Society of Milwaukee County, the State Medical Society, and the American Medical Association.

Survivors are his widow and one daughter.

Dr. Edward W. Cooney, Appleton, died suddenly in his office on September 11th.

Dr. Cooney was born in Cascade, Sheboygan County, in the year 1873. He graduated from the University of Illinois College of Medicine in 1904. In September of that year he opened his practice in Appleton and had remained there since that time.

He was a member of the Outagamie County Medical Society, the State Medical Society, and the American Medical Association.

He is survived by his widow and two daughters.

Dr. W. G. Riopelle, Beaver Dam, died of heart disease on September 9th at a Milwaukee hospital following an illness since last April.

Dr. Riopelle was born on Feb. 6, 1889, at Argyle, Minnesota, and entered the Pre-medical School at St. Boniface, Winnipeg, Manitoba, Canada, in 1910. He later entered Marquette University Medical School in 1915. His first year of practice was spent at Gilman, Wisconsin, then at Thorpe, Wisconsin, for five years; Chippewa Falls; Long Beach, California, and then came to Beaver Dam in June, 1924.

Dr. Riopelle was a past president of the Dodge County Medical Society and at the time of his death was a member of the Medical Economics Committee of the State Medical Society.

He was a member of the Dodge County Medical Society, the State Medial Society, and the American Medical Association.

Survivors are his widow and six children; Rheo, Elaine, Armand, Arthur, Beatrice and Wilfred, all of Beaver Dam.

Dr. J. D. Sullivan, Milwaukee, died suddenly of heart disease on September 5th at his home in Milwaukee.

He was born in Kenosha, January 8, 1879, and graduated from Marquette University School of Medicine in the year 1914. For many years he practiced medicine and operated a drug store with his brother in Kenosha but for the past twelve years had been practicing in Milwaukee.

Besides his widow, he is survived by one daughter.

Dr. F. E. McNamara, Milwaukee, died on September 17th after an illness of seven weeks.

Born in the year 1856, Dr. McNamara came with his parents to Milwaukee in 1861. He was a graduate of the Hahnemann Medical College, Chicago, in 1879 and for the past thirty years had maintained offices in Milwaukee.

Survivors are his widow, one daughter and one son.

SOCIETY RECORDS

New Members

L. W. Beebe, 1302 Tower Ave., Superior.

Reuben S. Grant, 1419 Washington Ave., Stevens Point.

W. C. Sheehan, 441½ Main St., Madison, Wis.

Jerome T. Jerome, 16 S. Henry St., Madison.

Kenneth E. Lemmer, Wisconsin General Hospital, Madison.

C. A. Olson, Hammond.

Max Bornstein, 205 E. Wisconsin Ave., Milwaukee.

Fred A. Soles, Platteville.

Frank K. Dean, 113 N. Carroll St., Madison.

Kenneth C. Kehl, 523 Main St., Racine.

Change in Address

J. L. Rens, Weyerhauser to Phillips.

J. D. Fuller, Brownsville to 407½ Oak St., Baraboo.

J. G. Moss, Philadelphia, Pa., to Francis Creek, Wis.

Anna M. Wenzel, Superior to 114 N. Johnson St., New Orleans, La.

E. J. McNulty, Adams to Elderon.

RADIO PROGRAM

Radio health talks are presented by the State Medical Society each Tuesday, Wednesday and Thursday morning at 9:00 A. M.

These talks are broadcast over the State-Owned Radio Stations,—WHA, Madison, and WLBL, Stevens Point.

The schedule for the next month follows:

October 15—Surgery and Anesthesia
October 16—What Price Mock Modesty
October 17—Treatment of Common Emergencies
October 22—Backache
October 23—Misconceptions That Make Mischief
October 24—The Prevention of Deafness in Children
October 29—Shopping For Health
October 30—Improving the Complexion.
October 31—Improving the Complexion (Continued)
November 5—Colds and Winter Asthma
November 6—Broken Bones
November 7—Your Sleep

MEDICAL ECONOMICS

FRIENDLY RELATIONS

In the last few years we have noticed a growing tendency for those professions that are directly and indirectly responsible for the care of the sick to form discussional groups to improve the service to the patient and to knit themselves together to protect their interests.

The joining together of physicians, dentists, nurses and pharmacists to more efficiently integrate those professions is becoming more and more frequent. The purposes of these meetings are twofold; first, to render a more efficient service to those who are sick and, secondly, to knit themselves together to protect their interests.

Frequent contact with those with whom the patient comes in contact will improve the service and give the professions an opportunity to "iron out" their differences and meet new problems that arise on a common basis. With the constant changes that are occurring, and those that are contemplated, in the treatment of the sick, it would seem that the common purpose of all might be advanced by an informal meeting of this type.

FOR YOU BUT NOT FOR ME

One of the more active proponents of mass production methods as applied to the field of medical care has been Mr. Edward A. Filene and his 20th Century Fund.

Now we note that while Mr. Filene was traveling in Russia, where medicine is socialized, he became seriously ill. His staff called for and obtained the services of the leading physicians in Russia. For some reason they were not content with the outstanding specialists of that country and so they called for and obtained the services of the American physician attached to the American Embassy and then, not content with that, the press reported that they had asked for and obtained a special visa and passport for a leading specialist from Germany.

There are so many comments we could make that we have decided to make none at all.

MEDICAL EDITORS RECEIVE NEW TITLE

Mr. Kingsbury, until recently the Secretary of the Milbank Fund, in a letter published by the New York Herald-Tribune, stated that the Journal of the American Medical Association, the Journal of the Indiana State Medical Association, and the Journal of the Medical Society of the State of New York were among those which "have been misrepresenting me and my associates for more than a year" and "have resorted to every tactic known to propagandists to deceive the public".

In January your Society issued a booklet, "Sickness Insurance and the Propagandist Foundations". Among those listed as falling within this classification was the Milbank Memorial Fund.

Would it be reasonable to assume Mr. Kingsbury's statement is an admission?

WHEN YOU CAN HAVE IT YOU DON'T WANT IT

Those advocates of Sickness Insurance who have repeatedly wailed about uneven distribution of sickness costs have said "If there were only some way that these costs could be put within the reach of all —if we could just budget medical costs we would find an answer to our problem of providing medical care to all within their means to pay".

Now recently a County Medical Society in one of our states established a system whereby those who wished might be covered, under a policy issued by the Society, for all services rendered by the medical profession. The specific wording in their contract is "In fact, everything that the doctor does for the patient". The average monthly cost to the member is $1.41—certainly within reason for those in the "low income group".

Now it is interesting to note that after eighteen months of operation only 603 individuals have availed themselves of this opportunity to budget their medical care. A conservative estimate of those who are eligible for this all-inclusive service is 238,941. Only three-tenths of 1% of those eligible for the service have taken advantage of the offer. even after the facts had been placed before them through newspapers, field agents and employers.

PAYMENTS DIRECT

During the last month we have had several inquiries regarding salesmen, purporting to represent business houses of various types, who insist upon a check being made out to them to cover part of the cost of the order. We wish to caution all members approached by salesmen who demand a check made out to them personally or who demand cash as part of the cost of the merchandise purchased.

We have heard repeatedly of members who have made these monetary advances to unknown salesmen and have never received any returns on their advances.

Your best protection is to mail the order and your check direct to the firm from whom you are making your purchase.

ANOTHER SURVEY

A news item appearing in a Washington (D. C.) newspaper advises that a national survey may be launched "to determine the extent and severity of arthritis, Bright's disease, infantile paralysis and other physically incapacitating maladies".

WEEK-END VACATION INSURANCE

Newspapers throughout the country gave a tremendous publicity send-off to the New York group hospitalization plan giving it the title of "3¢ per day" hospital insurance. As follows the tendency when someone pays for something he usually tries to "get his money's worth". In New York we understand that the subscribers to the hospital plan are now making "week-end stays" at the hospitals. Those in charge state that these hospital stays are not for recreation but they present themselves at the hospitals during the week-end to avoid conflict with business hours.

The Detroit Medical News in commenting on this situation stated, "The fact remains, however, that 'illnesses' which are amenable to elective week-end treatment are hardly to be considered of importance from the standpoint of public health. Moreover, a complaint which does not interfere with business and which can be cured or even completely studied in forty-eight hours surely does not require hospitalization, not denying the undoubted curative value of bed-rest alone".

BUDGET DETERMINES THE SERVICE

In one of Wisconsin's daily newspapers it was interesting to note, in the same issue, the following headlines:

"HEALTH SECURITY NEXT PLAN FOR U. S. SECURITY"
"SOCIAL SECURITY ACT MAY DELAY BALANCED BUDGET"

Experience elsewhere has always proven that the budget determines the service. One can readily see the effect on the quality of medical care in the United States if sickness insurance were to be a reality.

HIGH SCHOOLS TO DEBATE SICKNESS CARE

In the May issue of the JOURNAL we advised our members that the high schools of Wisconsin were to debate the question of "Socialized Medicine" or "Sickness Insurance". In the June issue of the JOURNAL we advised our members that the University of Wisconsin Extension Division declared that they had not, at that time, determined to debate the question of Sickness Insurance as outlined by the National University Extension Association.

Miss Almere Scott, director of debating for the University Extension of the University of Wisconsin, now advises us that they have accepted the National University Extension Association's question for debate. The question for debate as prepared by the National University Extension Association is:

"*Resolved,* That the several states should enact legislation providing for a system of complete medical service available to all citizens at public expense".

Approximately 150 high schools in the state request debate material from the University Extension Division and we assume that at least that many will debate the question during the coming school year.

In the last several weeks we have had several requests from high schools requesting material to be used in the discussion of the question of Sickness Insurance. Unquestionably our readers will receive personal requests by high school students for debate material on the question and will be asked for the family physician's attitude toward sickness insurance.

Your State Society is preparing a debate outline for the debate teams throughout the state setting forth the reasons why so-called sickness insurance will not improve the medical care to the people of Wisconsin. When this outline is prepared it will be circulated to those high schools that intend to debate the question this year.

Every member of the State Society should be well informed on the subject of Sickness Insurance so that when his advice is sought by the high school debaters he may be in a position to intelligently discuss this subject from the view point of both the public and the profession. Toward the end that every member may discuss this question with the debaters in his community your Society urges upon each member to study the several pamphlets that have been prepared by the American Medical Association on this subject. We particularly recommend to you the following pamphlets:

- Sickness Insurance Not the Remedy
- Sickness Insurance and Sickness Costs
- Sickness Insurance Catechism
- Sickness Insurance and the Propagandist Foundations
- Discussion Outline on Sickness Insurance (in preparation)

You may secure additional copies of these pamphlets by writing your Secretary.

When you are called upon to assist your high school students in the preparation of their arguments it is well to bear in mind the fact that these students do not have as mature a mind as you and that in discussing the entire subject be sure that you are not "talking over their heads".

We can not urge too strongly that our members thoroughly familiarize themselves with this entire subject and we wish to emphasize to you that the state office of your Society is anxious to be of service to you should any questions arise on the subject of the high school debate of Sickness Insurance.

SYSTEM—NOT SERVICE

In conjunction with this subject it is interesting to note in a recent issue of "Minnesota Medicine" the reaction of one of the prominent northwestern physicians to the European systems of sickness insurance. We reprint here the remarks of Dr. C. W. Mayo as they appeared in the September issue of "Minnesota Medicine".

"Individual impressions are not to be misconstrued as facts. What one person sees in one light, another person sees in a totally different light. On my visit to Europe I attempted to be unbiased, to learn not to go about with a smug feeling of satisfaction that America leads the world.

"It is not without a feeling of awe that a doctor visits such great countries as Italy, Hungary, Austria, Germany and England, for from all of them at various times have come epochal advances in both medicine and surgery, vitally important to the present high standard of the art and science of the practice.

PRIVATE PATIENT IS RARE

"As to the present state of the field of medicine in these countries, it was my feeling that it was rather seriously affected by the political and financial unrest, may I call it, which I found evident, although in varying degrees, in practically all of the places I visited. The causes of this unrest need not be accounted for here, but the results of this unrest, as it has affected the care of the sick, the field of research, and the mental and financial status of the average doctor, were of intense interest to me.

"You are all to some extent familiar with the continually growing sickness insurance plan which is compulsory in most continental countries. Where it exists, it has become like a huge octopus, involving in its tentacles all professions, businesses, laboring

trades, and government departments, each of which seems to have its own headquarters for insurance. For instance, in most places the Waiters' Insurance Company was very strong, and a waiter needing medical attention was well taken care of. He is required to contribute a percentage of his salary to secure this benefit.

"Many doctors are employed by the various insurance companies, and at ridiculously low salaries, but most of them will accept a low but sure salary because the private patient is comparatively rare, except to the older and well-known doctor. The private patient in most cases is one who has been advised by his insurance doctor to follow a certain line of treatment and goes to a private doctor for confirmation and perhaps for treatment.

REAL TALENT BURIED

"In Budapest I visited one of the buildings which houses a large insurance company. It was crowded; thousands passed through it each day. There they paid in their weekly money, reported for relief money, were treated for minor conditions, or, if sick, came for diagnosis and advice. Time, perhaps, will smooth out many of the rough spots in health insurance as practiced abroad. It appears to offer much and to be sound theoretically, with socialistic tendencies. Actually, it is not as practical as it seems, either to the beneficiary or to the doctor on whom the burden rests; real talent has been buried in positions requiring none. Physicians trained in medical or surgical specialties too frequently hold down posts which keep them so busy with trivial duties and red tape that they do not have the time or the courage, even if the facilities were available (which they are not), to advance in either the art or the science of medicine.

"There are, of course, men here and there who are exceptions to the rule and who, despite the handicaps of lack of financial aid and lack of modern equipment, are accomplishing problems worthy of record. Among them may be mentioned Bence of Budapest and his study of pigs after gastrectomy. He has produced what appears to be true pernicious anemia, which develops in these animals, not the first, but the second year, after total gastrectomy.

RESEARCH AT LOW EBB

"Suffice it to say, as far as medical research is concerned, that at present it is generally at a low ebb, and the reason for this is apparent. It is not from lack of interest of those concerned, but rather from factors which are, we hope, only temporarily out of the control of those concerned.

"The attitude of mind of the younger doctor particularly appears to be filled with uncertainty, not with uncertainty as to whether he wants to be a doctor, but rather uncertainty of opportunity. This was particularly true in Austria and Hungary, where, despite much reduced territory, a large number of men and women are still being educated in medicine, a proportion far above that actually needed for the population. Men, even though talented, cannot long live and work productively without a sense of security, and security at present is well-nigh impossible."

Certainly it is evident from the reactions of Dr. Mayo that he views with great concern the effect that socialized medicine or sickness insurance has on scientific medicine. It has always been the aim of the medical profession to render to the public the best quality of medical service at their command. We have always contended that those systems that have been adopted in European countries have lowered the quality of medical care and it is interesting to learn from one who is so sincerely devoted to the rendering of good medical care that quality medical care and "quantity" medical care do not go hand in hand.

LAWYERS GIVEN ADVICE

At this session of the legislature bills affecting all professions have been introduced. When a measure was introduced in the Assembly to give notaries virtually the right to practice law (analogous to giving chiropractors the right to treat the sick) the lawyer members of the Assembly sent out a call for help to the State Bar Association and individual attorneys throughout Wisconsin.

We reprint the letter sent to Mr. T. L. Doyle, President of the Wisconsin Bar Association, because it is of interest to note how legislators themselves react to lack of information.

WISCONSIN LEGISLATURE

Assembly Chamber

Madison, June 24, 1935.

Mr. T. L. Doyle, President,
Wisconsin Bar Association,
Fond du Lac, Wisconsin.

Dear Mr. Doyle: Enclosed please find a copy of Bill No. 375, A., introduced by Assemblyman Theodore Swanson of Ellsworth, who represents Pierce County in the state legislature. Enclosed also please find the roll call of the members of the Assembly who voted in favor of engrossment of this bill by which the Assembly advanced it to final passage, despite the unanimous recommendation of the Assembly Judiciary Committee that it be indefinitely postponed. Enclosed also please find a newspaper clipping which appeared in one of the Madison dailies containing some of the statements made by Mr. Swanson.

We are taking this action in the hopes that you will read this letter at length and place it squarely before the meeting at Lawsonia to try and prove to you and the members of the bar the absolute necessity of definite action being taken by the bar on bills that are presented to the legislature that are of vital interest to every practicing attorney and every citizen of Wisconsin.

The members of the Judiciary Committee as well as the rest of the signers of this letter who are all practicing attorneys are, to say the least, disgusted with the laxity of attention that attorneys give to legislation affecting our profession. It is, in the opinion of the signers of this letter, about time that the State Bar and attorneys of Wisconsin wake up to the fact that the handful of attorneys who are members of the legislature need assistance to withstand the assaults of every Assemblyman and citizen who presents through his representative a piece of legislation that is not only against the interests of our profession but in many cases a direct insult to the intelligence of the right thinking people of Wisconsin.

The mere adoption of a resolution at your Lawsonia meeting or any other meeting of the bar protesting against any bill or bills is of no force or effect. What is needed and should be done, as every other profession does, is to notify its members of any legislation that is against their interests and who in turn are very diligent in letting their representatives know their position in regard to the bills in the legislature. In sum and substance we want to frankly state that it is about time that the State Bar of Wisconsin wake up to the fact that attorneys are, and it is their duty to be, interested and active in raising their voices against bills that are detrimental to our profession.

During this session and the past but a very small number take time and patience to even appear on important legal questions that are before the legislature. Considering the action taken by the Assembly on Bill 375, A., we hope that you will be able to see that the work necessary in advancing the Integrated Bar bill in any form is at the present time an impossible task.

We sincerely trust that the Lawsonia meeting will not adjourn without giving this matter definite attention. Every attorney should know the name of his representative and be in position to immediately inform his representative of his views on legislation. We trust that every delegate of your meeting will at least take the small amount of time and trouble necessary to secure this information and that he will immediately upon returning home voice his protest against the passage of bill No. 375, A.

Very truly yours,

J. W. Carow,
V. W. Nehs,
Cornelius Young,
Milton T. Murray,
R. W. Peterson,
Allen J. Busby,
V. W. Thomson,
James T. Cavanaugh,
G. H. Weissleder,
Clarence V. Olson,
Members of the Assembly Judiciary Committee.

Louis N. Staudenmaier,
B. M. Vaughan.

Fourteen Hundred Register at Largest Meeting; Dr. S. E. Gavin, Fond du Lac, Named President-Elect

ONE thousand members of the State Medical Society of Wisconsin, a hundred out-of-state physician guests, and upwards of one hundred newly licensed physicians in Wisconsin were registrants at the Ninety-Fourth Anniversary Meeting of the Society held in Milwaukee September 17–20. The registration exceeded by several hundred all previous records of the Society and included close to 50% of the entire membership roll.

Dr. Stephen E. Gavin, Fond du Lac, was the unanimous choice of the House of Delegates for the office of President-Elect to succeed Dr. Ralph M. Carter of Green Bay as President at the conclusion of the 1936 meeting. Other elections included the re-naming of Dr. Gunnar Gundersen of La Crosse as Speaker and Dr. James C. Sargent, Milwaukee, as Vice-Speaker of the House of Delegates. Dr. Joseph F. Smith, Wausau, was reëlected delegate to the American Medical Association; Dr. Chas. W. Giesen of Superior was elected alternate-delegate, and Madison was chosen as the place for the 1936 sessions.

The House of Delegates held its initial meeting on Tuesday evening, September 17th, a second session on Wednesday evening, and a final session on Thursday morning. Reference committees of the House were in session throughout Wednesday preparing their reports for the Wednesday evening session. The House sessions included significant statements of policy and numerous resolutions formulating the position of the Society during the coming twelve months.

One of the interesting features of the meeting was the Hobby Exhibit to which two-thirds of Juneau Hall was devoted. This exhibit, under the direction of the Woman's Auxiliary of the Medical Society of Milwaukee County, contained exhibits of more than thirty members of the Milwaukee Society. The exhibit hall was constantly filled with members and guests viewing this most interesting display. In Kilbourn–Walker Halls adjoining, forty-four scientific and technical exhibits were shown. This was the largest exhibit in the history of the Society and attracted a constant flow of members viewing in particular the fourteen scientific exhibits which included both Gold Medal exhibits of the Atlantic City session of the American Medical Association.

Four hundred heard Dr. Edward H. Cary, of Dallas, Texas, Chairman of the Committee on Legislative Activities of the American Medical Association, at the Annual Dinner–Dance in the ballroom of the Schroeder Hotel Thursday evening. Preceding Dr. Cary's address Council Awards were presented to President-Emeritus E. A. Birge of the University of Wisconsin and Dr. Arthur J. Patek of Milwaukee. Four hundred physicians attended the annual smoker given in the hotel following the Wednesday evening session of the House of Delegates and the scientific presentation of Dr. Herrmann of Cincinnati.

COMMITTEE APPOINTMENTS

Appointments to committees of the Society as announced by President-Elect Carter at the Tuesday evening session of the House of Delegates and subsequently confirmed by the House, follow:

1. *Committee on Scientific Work.* Dr. Gunnar Gundersen of La Crosse to succeed Dr. Wenzel Wochos, of Kewaunee.
2. *Committee on Public Policy.* Dr. S. E. Gavin of Fond du Lac, to succeed himself.
3. *Editorial Board.* Dr. Stanley Seeger of Milwaukee to succeed Dr. G. H. Ewell of Madison.
4. *Committee on Medical Defense.* Dr. E. G. Ovitz of Laona is reappointed.
5. *Committee on Medical Education and Hospitals.* Dr. W. S. Middleton of Madison, to succeed the late Dr. C. R. Bardeen.
6. *Committee on Medical Economics.* Dr. A. E. Rector, of Appleton, to succeed Dr. W. G. Riopelle, of Beaver Dam.
7. *Committee on Health and Public Instruction.* Dr. Wenzel Wochos of Kewaunee, to succeed Dr. W. G. Sexton of Marshfield.
8. *Committee on Coordination of Medical Services.* Dr. Joseph Smith of Wausau is reappointed.
9. *The Cancer Committee.* Drs. D. L. Dawson, Rice Lake; R. L. MacCornack, Whitehall; Cyril G. Richards, Kenosha; Gideon Benson, Richland Center, and George Moore, Antigo, are all reappointed.
10. *Committee on Child Health and Protection.* Dr. Carl Henry Davis, Milwaukee, Chairman; Dr. A. B. Schwartz, Milwaukee; Dr. H. A. Sincock, Superior; Dr. R. L. Cowles, Green Bay; Dr. Carl Harper, Madison; Dr. W. T. Clark, Janesville.
11. *Committee on Medical Care of Veterans.* Dr. C. A. Dawson, River Falls; Dr. Otho Fiedler, Sheboygan, and Dr. E. C. Cary, Reedsville.
12. *Committee on Medical History.* Dr. F. Gregory Connell, Oshkosh, with power to appoint his own associates.

COUNCIL AWARDS

The Council Awards presented at the Annual Dinner, were made by Dr. Arthur W. Rogers, Oconomowoc, Chairman of the Council. Dr. Rogers' presentation follows:

"The success that has crowned so many of the public spirited projects of our State Medical Society of Wisconsin since its organization in 1841, and the strong position that we occupy today, has been the result of the work of no one man, nor the efforts of a few.

"From as far back in the history of our Society as I can recall, I am impressed by the responsiveness of members and officers alike to their individual duties and needs of their State Society.

"It is true, of course, that certain men, by virtue of the responsibilities vested in them by their fellow members, have had larger opportunities for service. Thus a secretary of a county medical society, a councilor or a president may, by his untiring work, leave behind him outstanding accomplishments. We, in Wisconsin, have had large numbers of such men, and, as Chairman of the Council, I wish to pay to them the respect and appreciation that will ever be theirs from a grateful Society.

"Among this host of contributors to our achievements there stand out, from time to time, one or two who have not only rendered long and exceptional services and discharged their duties faithfully, but have actually given of themselves far beyond the call of office because of the love of the work and the feeling of satisfaction in doing something more than that required, for their Society, for their brethren in medicine, and for the people of the state.

"The Council of this Society has taken recognition of these members and from time to time wishes to bestow upon them a little token as small in intrinsic value as it is large as an emblem of the faith, high regard, and affection of their fellow members.

"To Doctors John M. Dodd, Cornelius A. Harper, John J. McGovern, Louis M. Jermain, Edward Evans, Mina B. Glasier, Arthur W. Rogers, Rock Sleyster, and Olin West have we given the award,—the gold seal of our Society. Tonight I stand to give two more.

EDWARD ASAHEL BIRGE

"A son of New York, ever a scholar, during fifty years of service at the University of Wisconsin an instructor in natural history, its professor of zoology, Dean of its College of Letters and Science, Act-

ing President, then President, and now President Emeritus,—for your early scientific approach to the basic training of students for professional careers of service; for your vision and perseverance over a forty-year period that led to the establishment and development of the pre-medical course at the University of Wisconsin, and for your depth of perception of the problems of medical service, we, your associates, give you this seal of our Society as a token of your achievement and our esteem and affection.

ARTHUR JACKSON PATEK

"A son of Wisconsin, founder, six years editor, and nine years a member of the publication committee of the Wisconsin Medical Journal; originator of the medical defense fund of our State Society and for twenty-six years the Secretary of that Fund; a President of the Milwaukee Academy of Medicine, of the Medical Society of Milwaukee County, and of the State Medical Society of Wisconsin; eminent internist and long chief-of-staff of Mount Sinai Hospital of Milwaukee,—for your joint gift of the Journal to your Society, for your early forceful editorial policy establishing and upholding standards of sound medical practice, and for your great service over a quarter of a century in protecting your fellow members from grave injustice, we, your fellow members, give you this seal of our Society as a token of your achievement and our esteem and affection."

HOUSE OF DELEGATES

Important actions of the House of Delegates included:

1. Adoption of a supplemental report of the Committee on Medical Economics (reprinted in full following).
2. Adoption of a resolution requesting the Board of Medical Examiners to consider ways and means of recognizing the examination of the National Board of Medical Examiners.
3. Requesting the Board of Medical Examiners to take action with reference to graduates of foreign schools who seek Wisconsin license after being denied admittance to schools in the United States.
4. Created a special committee to advise on medical problems arising in county and state institutions.
5. Created a special committee to study laws pertaining to mental hygiene and commitment of the insane.
6. Adopted a resolution requesting broader medical service for students injured in school athletics.
7. Adopted a resolution holding standards of ethics for pathologists and roentgenologists employed by hospitals, and requesting county societies to appoint grievance committees to carry into force the principles of ethics of the American Medical Association relating to hospital practices in these two fields as adopted at the Cleveland session.
8. Requested officers to study a proposed licensure system for public hospitals.
9. Adopted committee reports as published in the August issue of the Wisconsin Medical Journal.
10. Re-established the dues of the Society at $15.00.
11. Called upon the officers to seek the adoption of a lien law in the 1937 session of the Legislature and to make such a bill the primary point in that legislative session.
12. Requested the Committee on Public Policy to seek added funds for the work of the investigator to weed out quackery.
13. Heard proposed amendments to the Constitution (to be acted upon in 1936) that:
    a. Would provide additional Councilors in districts embracing a membership of 250 or more;
    b. Provides election of Councilors by the Council District meeting;
    c. Re-states, to meet legal objections, that section of the Constitution which relates to the election and terms of officers.
14. Adopted a resolution looking towards making the retiring President a member of the Council for a period of one year following his retirement.
15. Called upon the Council to provide a travel expense fund for the President during his term of office.

16. Requested the Committee on Scientific Work to provide certificates of awards or merit for excellence of exhibits.

17. Urged County Medical Societies to hold elections in October to the end that incoming officers may be in position to handle revenues earlier in the year.

COMMITTEES SELECTED

In opening the Tuesday evening session Speaker Gundersen appointed the following reference committees of the House:

1. *Credentials*—Drs. H. H. Christofferson, Colby; N. P. Anderson, La Crosse, and A. L. Myrick, De Soto.

2. *Standing Committees* — Drs. E. F. Schneiders, Madison; C. W. Giesen, Superior, and H. J. Gramling, Milwaukee.

3. *Reports of Officers*—Drs. Francis D. Murphy, Milwaukee; C. W. Henney, Portage, and T. J. Redelings, Marinette.

4. *Resolutions*—Drs. J. C. Sargent, Milwaukee; D. J. Twohig, Fond du Lac; A. E. McMahon, Glenwood City; L. W. Hipke, Milwaukee; and F. E. Butler, Menomonie.

The Committee on Nominations, as chosen by the Delegates, consisted of Drs. H. A. Peters, H. B. Keland, J. Newton Sisk, Wilson Cunningham, A. C. Radloff, D. J. Twohig, N. P. Anderson, T. J. Redelings, H. H. Christofferson, W. C. Henske, Chas. W. Giesen, Henry Gramling, and W. S. Bump. It was this committee that brought in the nominations for the office of President-Elect, Speaker and Vice-Speaker of the House of Delegates, Delegate and Alternate-Delegate to the American Medical Association, and the place of the 1936 meeting.

COUNCILOR ELECTIONS

Five terms of Councilors expired at the Tuesday evening session of the House of Delegates. The usual recess was declared to permit a caucus by the Delegates in each affected district. Upon reconvening of the House nominations were brought in, there being but one presented from each district. Councilors elected were as follows:

1. Seventh district—Dr. H. A. Jegi, Galesville, to succeed Dr. Spencer Beebe, Sparta, who refused to consider longer service.

2. Eighth District—Dr. G. R. Duer, Marinette, to succeed himself.

3. Ninth District—Dr. Joseph F. Smith, Wausau, to succeed himself.

4. Tenth District—Dr. Frank E. Butler, Menomonie, to succeed Dr. H. M. Stang, Eau Claire.

5. Thirteenth District—Dr. Jos. W. Lambert, to succeed Dr. I. E. Schiek, Rhinelander.

DUES

When the House held its Wednesday evening session it heard the following report of the Resolutions Committee in the matter of dues:

"Each year the Committee on Resolutions is given the task of recommending to the House of Delegates the dues that shall be charged the members of the Society during the ensuing year. Your Committee has had before it the financial statement of the Treasurer, as well as the Budget proposed for the Society for the coming year. It would call attention to the following facts: First, that over the years and up until 1925 the Society was able to build up a financial reserve approximating $25,000.00; that since that time the activities of the Society were such as to consume practically all of its income, maintaining approximately this same reserve; that this existed until the present year when, because of increased demands made upon the organization in behalf of its members, it has been necessary to dip into the reserve of the Association to the amount of somewhere between $3,500.00 to $5,000.00;

"Second, that the Budget for the coming year has been studied carefully by the officers

and that, careful as they have been to keep the various expenses of the organization at an effective minimum, the probable expenses of the Society during the coming year are such as to require a further dip into its already diminishing reserve if dues are to be continued on the same basis of $12.00 a year.

"Third, that the Council, feeling the wisdom of such a move, early in 1932 decreased the dues of the membership from $15.00 to $12.00.

"On the basis of these and other facts, your Committee recommends that the dues of the membership in this Society for the coming year shall be returned to the regular $15.00 per year basis. On behalf of the Committee I move that the membership dues for the coming year be set at $15.00."

GOLF TOURNAMENT

Event		*Winner*	*Score*	*Prize*
Low Gross	1	Dr. Mark J. Bach	77	President's Cup and Cocktail Shaker
	2	Dr. E. W. Miller	79	Binoculars
	3	Dr. Edwin Bach	79	Burdick Lamp
	4	Dr. J. E. Rueth	81	Golfer's Rain Coat
	5	Dr. G. R. Love	83	Sand Blaster
Low Net	1	Dr. C. F. Conroy	70	Secretary's Cup & Icer
	2	Dr. R. J. Coleman	72	Scale
	3	Dr. N. Wegmann	73	Sweater
	4	Dr. L. B. Hansen	75	Sand Blaster
	5	Dr. J. J. King	75	Chipper
High Gross		Dr. A. C. Nugent	118	Thermometer Set
High Net		Dr. Millard Tufts	99	3 pairs Socks
Hole #3				
High Gross		Dr. D. D. Mehigan	9	3 Golf Balls
Hole #16				
Closest to Pin		Dr. R. J. Schacht	2 ft. 3¾"	2 pairs Socks
First Nine Holes				
Low Gross		Dr. A. L. Curtin	38	Golf Bag
Low Net		Dr. A. H. Carthaus	36	Sand Blaster
Second Nine Holes				
Low Gross		Dr. I. B. Reinfenrath	41	Floor Lamp
Low Net		Dr. G. A. Sullivan	35	Sand Blaster
First Nine Holes				
High Gross		Dr. R. E. Martin	57	Sand Blaster
Second Nine Holes				
High Gross		Dr. J. A. Kelly	59	Sweater
Low Putts				
18 holes		Dr. E. L. Bernhart	31	Chipper
1st Nine		Dr. H. J. Brehm		Cap
2nd Nine		Dr. H. Mendeloff		3 pairs Socks
Low Gross over 60		Dr. A. J. Somers	93	Sweater
Low Net over 60		Dr. R. G. Sayle	81	Interval
Low Total				
Holes 4–8–12–16		Dr. F. A. Thayer	14	Hand Bag
High Total				
Holes 4–8–12–16		Dr. E. L. Bolton	22	2 Golf Shirts
Birdies		Drs. R. E. Fitzgerald Edwin Bach J. E. Rueth M. J. Bach R. J. Schacht A. L. Curtin		2 Golf Balls each

Miscellaneous prizes distributed by Mr. Gallett on Blind Bogey, and remaining prizes distributed by draw.

Participants in the Golf Tournament included: Drs. F. A. Thayer, A. E. Rector, G. A. Sullivan, R. E. Fitzgerald, M. E. Ross, R. G. Sayle, W. F. Grotjan, B. E. Urdan, H. B. Podlasky, H. Mendeloff, R. E. Martin, H. J. Brehm, E. W. Schacht, R. J. Schacht, G. J. Schulz, E. B. Keck, J. C. Griffith, C. F. Conroy, J. C. Dean, G. R. Love, C. W. Lockhart, M. P. Andrews, D. F. Pierce, S. A. McCormick, P. J. Niland, D. D. Mehigan, I. B. Reifenrath, C. O. Schaefer, E. L. Bolton, W. H. Towne, F. C. Christensen, J. A. Jenner, W. H. Remer, G. H. Fellman, R. L. MacCornack, A. J. Somers, G. H. Ewell, C. W. Morter, A. L. Curtin, J. E. Rueth, S. R. Mitchell, J. A. Kelly, M. J. Bach, E. W. Miller, M. Tufts, P. E. Oberbreckling, L. B. Hansen, Wm. Ryan, M. B. Byrnes, N. E. McBeath, A. H. Carthaus, H. A. Pfeifer, A. C. Nugent, E. L. Bernhart, A. D. Kilian, N. J. Wegmann, Edwin Bach, E. M. Rice, F. A. Thompson, J. J. King, and L. P. Stamm.

Supplementary Report of the Committee on Medical Economics Adopted by Delegates

To the 1935 House of Delegates:

Officers of the Society and members of your Committee on Medical Economics have been studying throughout the year various proposals submitted from within and without the membership. We have also watched with pleasure the favorable progress of Bill 733, A., and its enactment into law as Chapter 350 of the Laws of 1935. In view of this recently enacted legislation and other material on which our studies have been completed, we have the following supplementary report and recommendations.

1. CARE OF THE INDIGENT. At the 1930 session of your House of Delegates, in acting favorably upon the report of the Special Committee on the Distribution of Medical Services, the House accepted the following formal statement:

"The care of the indigent is a community obligation. The physician should receive a reasonable compensation therefor and that charitable work that will always characterize the profession of medicine should be continued to that class of individuals who are endeavoring, under great handicaps, to maintain their independent financial status.

"The Society disapproves any system which provides a single practitioner to care for the indigent, except such as may be in institutions, for the reason that such a system is not conducive to securing a proper public service.

"We recommend that each component society investigate, in the light of its own peculiar requirements, those plans and suggestions advanced to provide a better service for the indigent sick."

One of the reasons for difficulty in perfecting arrangements between component county societies and county governments for the care of the indigent sick, was the failure of the charter law of the State Medical Society definitely to grant to the Society and its component groups power to enter into such contracts. Contracts were entered into by three component societies after careful wording by legal counsel of the Society, but lack of definite authority was not conducive to securing that attention and cooperation of the public which otherwise might have been had.

Chapter 350 of the Laws of 1935 states:

"(148.01) (3) The State Society, or a county society in manner approved by the State Society, may undertake and coordinate all sickness care of indigents and low income groups, through contracts with public officials, and with physicians and others, and by the use of contributions, cooperative funds and other means, provided only that free choice of physician within such contracts shall be retained and that responsibility of physician to patient and all other contract and tort relationships with patients shall remain as though the dealings were direct between physician and patient."

It is impressed upon your committee that while free choice of physician was a guarantee of the Federal Government under the Federal Emergency Relief Administration, there is already manifest a tendency among county governments to abandon this principle whenever Federal relief funds withdraw from the picture. The fact that the principle of free choice was recognized and made mandatory under the Relief Administration in Wisconsin is plainly indicative of the fact that such reasonable free choice was recognized to be fundamental to any degree of proper service to the indigent.

Whether care of the indigent be financed from federal, state, or local funds, jointly or singly, your Committee contends that the principle of free choice of physician should be maintained for all time in the future.

Your Committee recognizes that large numbers of county governments in this State are in a period of financial stringency and that any original future agreements between county medical societies and county governments for the care of the indigent must be at rather nominal figures. The wise and safe policy for each County Medical Society to pur-

sue is to establish, through frequent conferences and cooperative efforts, friendly relations with relief officials to acquaint them with the better medical service to be had by the adoption of the principle contained in Chapter 350, Laws of 1935. It is desirable and important that frequent conferences be held by the representatives of component County Medical Societies with relief officials in an effort to establish local medical relief programs mutually agreeable to physicians and relief officers and advantageous from the viewpoint of adequacy of medical service to the indigent.

Recognizing that, with the gradual withdrawal and contraction of the federal relief program, local governmental units again gradually will assume direction of local programs for the care of the indigent sick, we recommend that: The House reaffirm its quoted statement of 1930 as representing its continued position on the subject of care of the indigent.

2. CARE OF THE INDIGENT SICK—TYPES OF CONTRACTS. To enable any county medical society to enter upon the proper contract, the Secretary of the State Medical Society is hereby instructed upon request to provide such component society with such contract form as may be necessary to comply with local conditions as stated by officers of such component society.

No such contract shall be entered upon except under the provisions of Chapter 350 of the Laws of 1935.

3. CARE OF LOW INCOME GROUPS—SOCIAL SERVICE. Your Committee recognizes that in some few of the larger cities of the State it may seem advisable to the local medical profession, as represented in a component county medical society, to establish a local agency wholly under the control of the component society for the sole purpose of enabling physician and patient to make such credit arrangements, based upon social service investigation, as will assist low income groups to secure needed medical service at a cost within their means to meet. The type of bureau here contemplated is one which will render to the patient only budgeting suggestions and to the physician only credit information that the physician may give all needed service to the patient at a cost within the means of the patient to afford out of his own resources.

Your Committee feels that the House may well endorse at this time the principle of such service for large population areas wherein such social service bureaus may be contemplated. The Committee believes, however, that specific plans should be submitted to the Council in order that each component society may have the benefit of their constructive advice and aid.

3a. CARE OF LOW INCOME GROUPS—CONSULTING SERVICE. In the event that component societies submit plans for the distribution of medical service under the terms of Chapter 350, Laws of 1935, your Committee recommends that the Council, or Executive Committee thereof, specifically be authorized to employ on a per diem basis competent physicians or laymen to investigate the needs and feasibility of specific plan under discussion, reporting their findings to the Council. The purpose of this recommendation is to grant to the Council broad powers for investigating the public service to be attained under any plan brought forward.

3b. CARE OF LOW INCOME GROUPS — BY OTHER THAN STATE OR COMPONENT SOCIETY PLANS. Your Committee recommends to the House that inasmuch as the Legislature has enacted Chapter 350, Laws of 1935, the House adopt the following formal statement:

The Society disapproves the inauguration or operation of any plan providing for the care of low income groups by practitioners not representing the State Society or a component County Medical Society in a manner approved by the State Society.

4. DISTRIBUTION OF MEDICAL SERVICE. Recognizing that the Society, under Chapter 350 of the Laws of 1935, can best serve the public interests not only by concerted action but by continuous cooperative effort, your Committee recommends that the House amend the By-Laws to prevent any member from conducting himself in a manner which tends to defeat or does defeat the public purposes for which the Society is organized and is operated.

To accomplish this recommendation the Committee recommends the adoption of the following restatement and amendment to the By-Laws.

Amend the first paragraph of Section 3, Chapter XI of the By-Laws so as to read as follows:

Section 3. Each county society shall judge of the qualifications of its members, subject to review and final decisions by the Council of the State Society. Every reputable and legally qualified physician who is a bona fide resident of the same county shall be eligible to membership so long as he does not practice nor profess to practice sectarian medicine, or engage in practice in a manner in conflict with the Principles of Ethics of the American Medical Association,[1] *or so conduct himself as to defeat or tend to defeat the purposes for which the Society is organized and is operating.*

4a. DISTRIBUTION OF MEDICAL SERVICE, APPROVAL OF PLANS. Recognizing that the several component societies may wish to consider other plans for the distribution of medical services under the terms of Chapter 350 of the Laws of 1935, your Committee recommends that the House formally designate the Council of the Society with power to approve or disapprove, in the name of the Society, such plans under the law stated.

5. DISTRIBUTION OF MEDICAL SERVICES—PUBLIC KNOWLEDGE. While it has long been the self-imposed obligation of the profession of medicine to furnish medical service to all at a cost

within their individual means to meet, as result of continuous propaganda over many years by those who seek to tear down the standards of scientific medicine, there is today prevalent among some of the laity the thought that the services of medicine are only to be secured at a fixed price.

To the end that organized medicine may continue most effectively to discharge its obligation to the public and profession alike, your Committee submits herewith a proposed official announcement to be furnished to each member of the Society upon his own request. The Committee also submits a proposed credit form to accompany this announcement.[2]

The purposes of both largely will be evident upon their face and your Committee reserves for floor discussion statements to amplify in full detail this suggestion.

Respectfully submitted,

COMMITTEE ON MEDICAL ECONOMICS,
Paul Fox, M.D., Beloit, *Chairman*,
R. G. Arveson, M.D., Frederic,
J. G. Crownhart, *Secretary*.

Note: The third member of the Committee, Dr. W. G. Riopelle of Beaver Dam, did not participate in this report because of his serious illness and subsequent death.

[1] New material.
[2] The material referred to will be submitted to the membership for individual consideration shortly.

Assemblyman Vernon Thomson Honored at Meeting

ASSEMBLYMAN Vernon Thomson, Richland Center, was a guest of the Society on the occasion of the annual dinner. Before presenting the Council Awards, President T. J. O'Leary, Superior, introduced Mr. Thomson to the membership. President O'Leary's introduction follows:

Assemblyman Vernon Thomson of Richland Center

"In the past eight months the members of this Society have received bulletin after bulletin from our central office concerning pending legislation that affected the public health of this state. Debates in the Wisconsin legislature on some of these measures, no few of which threatened to vitiate every public health advance made in this state during the last twenty years, have been of particular interest to all of our members. We have been particularly pleased to note the championship of the health interests of the people of this state by many Assemblymen representing all political parties. But every time there has been a measure debated on the Assembly floor which has so affected the public health future of our citizens we have all read in the Journal and in our bulletins of the splendid floor leadership exercised by one of Wisconsin's Assemblymen to whose brilliant and persistent efforts can be credited in large part the health achievements of the present session of the legislature. This Assembly floor leader in the field of health who fought so vigorously for that which would protect the public health rights of the people of Wisconsin has not been a physician, but is a member of a brother profession,—that of the law.

"It is not always pleasant and sometimes it is politically inexpedient to challenge the underlying motives that make a pending bill a serious menace to our citizenry. Yet this Assemblyman, without personalities entering into his argumentation, time after time during the present legislative session, stood before his ninety-nine confreres to challenge them to do that which was right and not to follow the false leadership of those who would advance legislation that would benefit a small group at the expense of the hundreds of thousands. He has fought for the right and because it was the right, no bill that he opposed in his Assembly floor leadership has passed the legislature this session.

"I am both proud and happy to introduce to this audience one whose name is already familiar to you all and whose countenance we shall always look upon as being a true friend,—Assemblyman Vernon Thomson of Richland Center."

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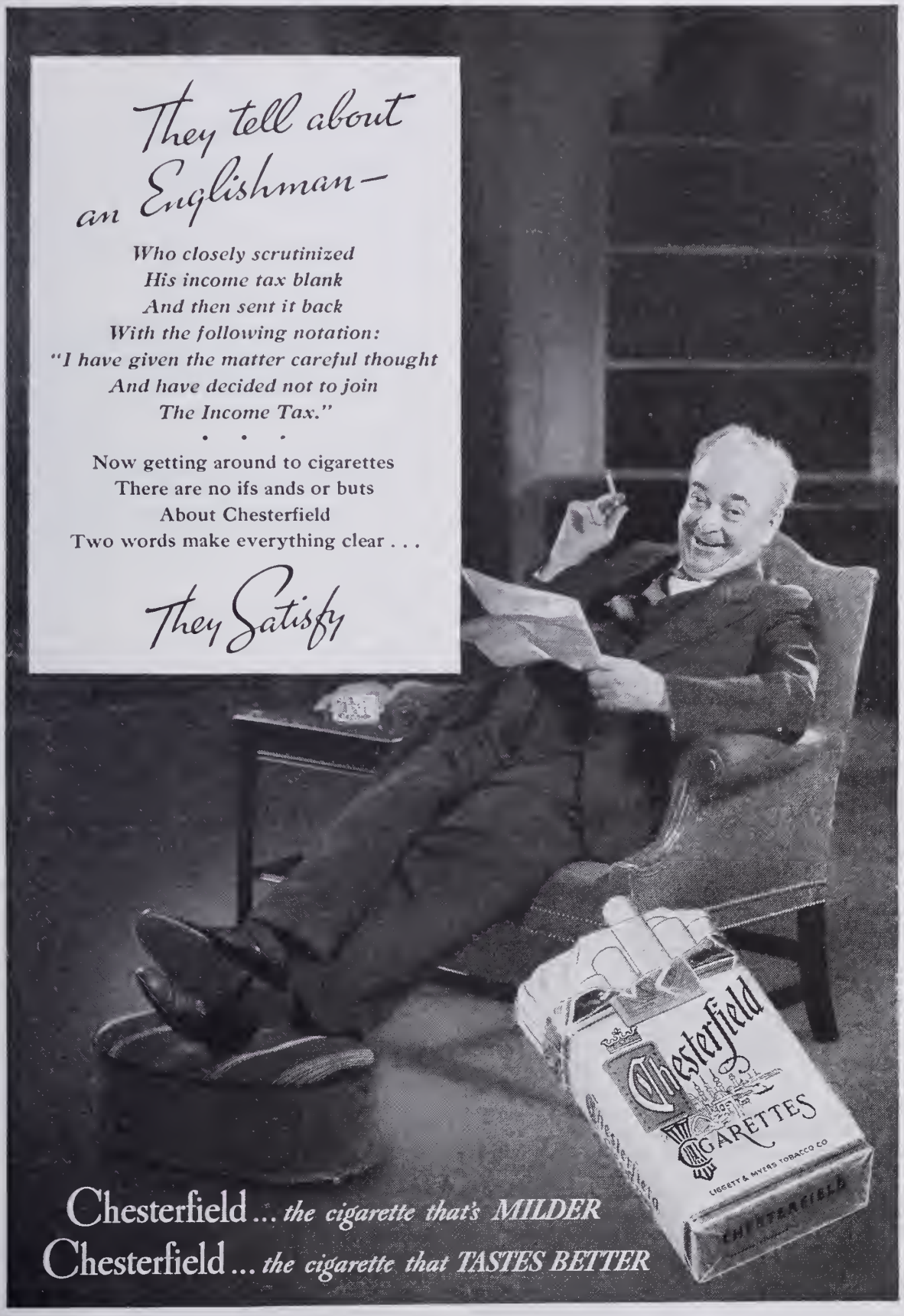

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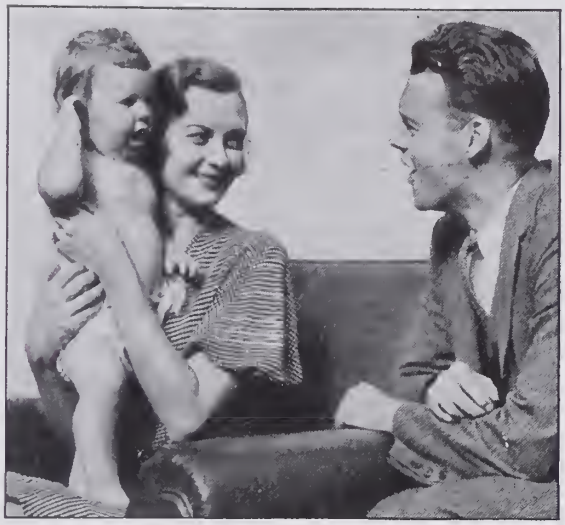

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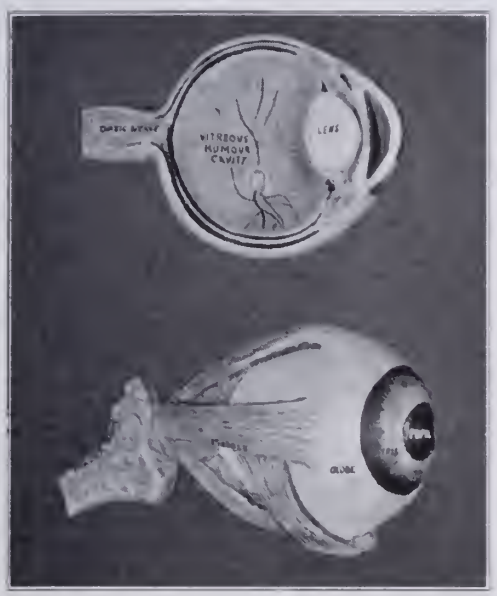

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Legislature Kills Last-Minute Bill Extending Time for Malpractice Suits

INTRODUCED through the Committee on Legislative Procedure, Senate bill 594 extending the time within which actions for malpractice might be instituted came before the Senate while the Society was holding its ninety-fourth anniversary meeting in Milwaukee. As a result of immediate protest the bill was recalled by the Committee and subsequently withdrawn. Under the terms of this measure, all persons whose causes for actions occurred between 1929 and 1934 would have received an extension of time in which to start the action until January, 1937.

A second measure, Bill 494, S, granting the State Board of Medical Examiners powers to pass upon and determine the standing of individual medical schools has now passed both houses of the legislature and has become a law. Under the old law any medical school that had a four-year course of eight months each teaching certain specified subjects was automatically qualified as a "reputable school". Schools not approved by the American Association of Medical Colleges or by the American Medical Association were thus automatically qualified in Wisconsin. Under the new law this situation has changed so that the Board of Medical Examiners may exclude graduates of non-approved colleges. The bill was signed by Governor La Follette on September 12th.

Wisconsin Anti Fee-Splitting Law

DECLARING that the intent of the Wisconsin Anti Fee-Splitting Law was not confined to the "ambulance chasing business", Attorney General J. E. Finnegan late in August held that each physician must render a separate bill for services direct to the patient. The opinion of the Attorney General, rendered upon request of the Governor, follows:

August 22, 1935.

Mr. F. W. Horne,
District Attorney,
Forest County,
Crandon, Wisconsin.

Dear Sir: Governor La Follette has forwarded a letter received by him from you under date of July 29th, pertaining to the splitting of fees by physicians and the Governor asks us to render an opinion to you on this matter and give a copy of the same to him.

In your letter to Governor La Follette you state:

Dr. "A" sent me a letter that Dr. "B" had sent him and also a check for $3.50, representing two-thirds of a fee that was paid to Dr. "B". Dr. "B" was the family doctor for a man by the name of "C". Dr. "B" does not perform major operations. After examining this man he diagnosed his illness as, I believe, appendicitis and informed him that he would call in Dr. "A" to perform the operation. It was satisfactory with his patient. Dr. "A" performed the operation. Mr. "C" pays Dr. "B" periodically. Dr. "B" charged a customary and going charge for the operation. As fast as Dr. "B" receives his installments he pays Dr. "A" two-thirds. Dr. "B" gave the anaesthetic and assisted Dr. "A" in the operation.

You state you have consulted with a judge of a circuit court and that you are satisfied that this law does not intend to apply where the relation of patient and doctor has already existed but is designed against undesirable doctors and lay persons from doing an ambulance chasing business by suggesting, advising and inducing patients to submit to a certain doctor and then that doctor in consideration pays the advising or inducing doctor.

Sec. 343.322, Subsec. (1) Stats. was first enacted in Ch. 570, Laws 1913. An official opinion on the interpretation of this law was rendered by Justice Owen, then Attorney General, on June 15, 1914, found in III Ops. Atty. Gen. 218. Twelve questions

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were submitted to him, which he answered in this opinion and came to the conclusion that the statute was intended to prevent of splitting or division of fees by physicians and surgeons and the act was construed as to its effect upon various practices by hospitals, physicians and surgeons.

The law was strengthened and broadened by Ch. 469, Laws of 1915. Another section was added by said chapter which is now subsec. (3) of said section and subsec. (1) was enlarged. Subsec. (1) reads as follows: (That part added by ch. 269, is italicized)

"Any physician or surgeon who shall claim or demand and collect and receive any money or other thing of value as compensation for his professional services in treating or operating upon a patient who was induced or advised by another physician or surgeon to submit to such treatment or operation, and who shall have previously paid or delivered, or shall thereafter pay or deliver, any money or other consideration to such other physician or surgeon or his agent, as compensation for such inducement or advice, or as compensation for assistance in the case, *or any physician or surgeon, giving such inducement or advice, who shall, as compensation therefor, or as compensation for assistance in the case, demand, receive or retain any money or other consideration directly or indirectly from the physician or surgeon treating or operating upon the patient so induced or advised,* shall be guilty of a criminal fraud and upon a conviction thereof shall be punished by a fine of not more than one hundred dollars or by imprisonment in the county jail not exceeding six months. Such conviction shall operate also as an annulment of the license held by the convicted person to practice as such physician or surgeon."

Subsec. (3) Stats., reads thus:

"Any physician, surgeon, nurse, anaesthetist, or medical assistant or any medical or surgical firm or corporation who shall render any medical or surgical service or assistance whatever or give any medical, surgical or any similar advice or assistance whatever to any patient for which a charge is made from such patient receiving any such service, advice or assistance, shall render an individual statement or account of his charges therefor directly to such patient, distinct and separate from any statement or account by any other person, firm or corporation having rendered or who may render any medical, surgical or any similar service whatever or who has given or may give any medical, surgical or any similar advice or assistance to such patient. Any violation of this provision shall be punishable by the penalty prescribed in subsection (1) of this section."

You will note that Judge Owen already, in the opinion rendered prior to the time when the law was strengthened, held that the physicians would have to make their charges direct to the patient. The law is now so clear, in my opinion, that there can be no question but that a practice such as you described in your letter comes clearly within the purview of that law. There is no ground for holding that it does not apply to a case where the relation of patient and doctor had already existed. If that were the case it would be an easy matter to circumvent this statute.

We are clearly of the opinion that the law was violated in the case described by you. This statute does not prevent more than one physician taking part and assisting in the operation but it requires that each physician render his bill direct to the patient.

Very truly yours,

J. E. FINNEGAN,
Attorney General.

J.E.F.:L.

Caption: Fee splitting by physicians is not permitted even where more than one physician takes part in the operation, but each physician must render his bill direct to the patient.

Inter-State Postgraduate Medical Association of North America at Detroit October 14-19

THE International Assembly of the Inter-State Postgraduate Medical Association of North America will be held in the Masonic Temple, Detroit, Michigan, October 14, 15, 16, 17 and 18, 1935, with pre-assembly clinics on Saturday, October 12, and post-assembly clinics Saturday, October 19, in the Detroit hospitals.

The Association, through its officers and members of the program committee, extends a very cordial invitation to all physicians in good standing in their State and Provincial Medical Societies to attend the Assembly. An unusual clinical and didactic program including all branches of medicine and surgery and the specialties has been arranged by the program committee.

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THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

Clinical Diagnosis by Laboratory Methods. Eighth Edition. By James C. Todd, Ph.B., M.D., late professor of clinical pathology, University of Colorado, School of Medicine; and Arthur H. Sanford, A.M., M.D., professor of clinical pathology, University of Minnesota (The Mayo Foundation). Thoroughly revised. Cloth $6.00 net. W. B. Saunders Co., Philadelphia.

Diseases of The Liver. By Samuel Weiss, M.D., clinical professor of gastroenterology, N. Y. Polyclinic Medical School and Hospital; attending gastroenterologist, Jewish Memorial and Beth David Hospitals, New York. Price $10.00. Paul B. Hoeber, Inc., New York, N. Y.

The Story of Medicine in the Middle Ages. By David Riesman, M.D., professor of the History of Medicine and professor of clinical medicine, University of Pennsylvania; Member, History of Science Society and Medieval Academy of America. Price $5.00. Paul B. Hoeber, Inc., New York, N. Y.

Diseases of the Thyroid Gland. By Arthur E. Hertzler, M.D., chief surgeon, Halstead Hospital; professor of surgery, University of Kansas. Third edition, entirely rewritten. C. V. Mosby Co., St. Louis, Mo. Price $7.50.

Policies and Procedure in Public Health. Proceedings of the annual conference of the advisory council of the Milbank Memorial Fund held on March 27 and 28, 1935, at the New York Academy of Medicine.

Diseases of the Nervous System. By Smith E. Jelliffe, M.D., formerly professor of psychiatry, Fordham University, New York; and William A. White, M.D., superintendent of St. Elizabeth's Hospital, Washington, D. C. Sixth edition, thoroughly revised. Lea & Febiger, Philadelphia. Price $9.50.

Food and Beverage Analyses. By Milton Arlanden Bridges, B.S., M.D., director of medicine, Department of Correction Hospitals, New York; consulting physician, Seaview Hospital, Staten Island, New York. Price $3.50. Lea & Febiger, Philadelphia. 1935.

The Anatomy of the Nervous System. (Fifth Edition). By Stephen Walter Ranson, M.D., Ph.D., professor of neurology and director of the Neurological Institute, Northwestern University, Medical School, Chicago. Cloth $6.50 net. W. B. Saunders Co., Philadelphia.

Preventive Medicine and Hygiene. By Milton J. Rosenau, professor of preventive medicine and hygiene, Harvard Medical School; Professor of Epidemiology, Harvard School of Public Health. Sixth edition. D. Appleton–Century Co., New York.

The Pneumonokonioses (Silicosis). Literature and Laws of 1934. By George G. Davis, M.D., Associate Clinical professor of surgery, Rush Medical College, University of Chicago, attending surgeon Cook County Hospital. Chicago Medical Press, Canal & Jackson Bldg., Chicago, Ill.

A Textbook of General Bacteriology. (Eleventh Edition). By Edwin O. Jordan, Ph.D., Professor of Bacteriology in the University of Chicago and in Rush Medical College, Chicago. Cloth $6.00 net. W. B. Saunders Co., Philadelphia.

Human Pathology. By Howard T. Karsner, M.D., professor of pathology, Western Reserve University, Cleveland, Ohio. Fourth edition, revised. J. B. Lippincott Co., Philadelphia.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

1,000 Questions and Answers on Tuberculosis. By Fred H. Heise, M.D., Medical Director Trudeau Sanatorium. Published by Journal of the Outdoor Life, 50 West 50th St., New York, N. Y.

The thousand queries are selected from the Question Box of the Journal of Outdoor Life, and the publication is in manual form. The classification and index are precise and the text is easily read.

The range of questions provides an interesting perspective of the mind of the tuberculous patient. It also provides both patients and physicians with brief but adequate answers to a representative group of questions on the subject.

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The Woman Asks the Doctor. By Emil Novak, M.D., F. A. C. S. Price $1.50. The Williams and Wilkins Company, Baltimore, M. D.

This book, written in a simple, direct and readily understandable style, fills a need long present in the field of gynecology. The purpose of this volume is chiefly educational, in that it aims to explain to the intelligent lay woman the significance of the cyclical

PHYSICIANS' EXCHANGE

Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

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WANTED—Location in small town by physician who has had five years general practice and two years postgraduate work. $50 will be paid for information leading to location. Address No. 989 in care of the Journal. OND

FOR SALE—Office and residence property of the late Dr. E. W. Cooney, corner of Allen and E. Lawrence Streets. Address Mrs. E. W. Cooney, 105 E. Lawrence St., Appleton, Wis. OND

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Objective and Experimental Psychiatry by D. Ewen Cameron, M.B., Ch.B., D.P.M. This book has much to recommend it. It is of especial value to anyone seeking a bird's-eye view of the various experimental work accomplished in psychiatric fields within recent years. A comprehensive bibliography at the end of each chapter is of an especial value. Dr. Cameron takes up such subjects as introversion, extroversion, intelligence tests, conditioned reflexes, statistics, pathology, basal metabolism, blood pressure, etc. The relationship of these various items to this type of science is well reviewed. This book is to be especially recommended for the graduate student or the teacher. A. C. W.

Policies and Procedure in Public Health. Proceedings of the annual conference of the advisory council of the Milbank Memorial Fund held on March 27 and 28, 1935, at the New York Academy of Medicine.

The reports presented are merely the briefest summary of the round-table discussions on various aspects of public health procedures as fostered for thirteen years by the Milbank Memorial Fund. The remarks are too general to be of much value to those not present at the meetings. P. F. C.

CARCINOMA

(Continued from page 743)

colon. Hence, the importance of realizing the significance of abdominal symptoms of a patient in the fourth and fifth decade of life, who has never had any bowel trouble before. It does not take any diagnostic acumen to make a diagnosis of carcinoma in an elderly patient who comes to you with a palpable mass in his abdomen and states that he has increasing difficulty with bowel movement and passage of blood in the stool. However, on the other hand, it takes all the diagnostic aids one can command to make a diagnosis of cancer of large bowel in the early stages, especially in the upper portion away from the examining finger and the proctosigmoidoscope. The x-ray frequently is of no service as Dr. Stratton states in 20% x-ray shows nothing. The symptoms may be very indefinite—pain may or may not be present in the early stages. In my own series of cases about 10% did not develop pain until well along in the course of the disease. Vague symptoms of so-called indigestion may be present—belching, bloating, discomfort after meals or after certain foods, sour eructations, fleeting tenderness, alternating constipation and diarrhoea. In other words, symptoms that may suggest gallbladder, stomach or appendix rather than colon.

Blood and mucus in the stool has appeared in over 90% of my own series of cases at some time in the course of the disease. One may be forced to make a diagnosis in this type of case by an abdominal exploration, a procedure that is perfectly justified when we realize the nature of the condition we are dealing with. Too often we see these patients in the obstructive stage or with palpable masses, which makes the ultimate prognosis extremely grave.

Dr. Stratton has of necessity touched rather lightly on the surgical side of the question. A great deal has been learned in the past twenty years in the handling of these cases. It has been realized, for instance, that primary surgery of the colon has been attended by a high mortality; that these patients debilitated by disease are not fit subjects for major surgical procedures. The value of replacing fluids, the necessity of supplying sugar and salt to combat alkalosis that is present, is a matter that I emphasized in a paper before this Society some years ago. Rankin has pointed out the value of frequent blood transfusions. In the obstructive case, the obstruction and not the cancer is the pressing problem, hence, the value of ileostomy and colostomy to decompress and clean up the infected field.

To touch briefly on the various surgical procedures that experience has proven to be of value, it may be stated as a surgical axiom that primary resection in the presence of an acute obstruction is accompanied by a 100% mortality. Hence, the value of preliminary ileostomy, cecostomy, or colostomy.

It is surprising what shrinkage will take place in a seemingly inoperable mass following these various measures of decompression. In other words, the size of a carcinomatous tumor is no true index of its operability. At the time of performance of the drainage operation opportunity is offered to search for metastasis and plan the future direct surgical attack.

In tumors of the caecum a preliminary ileostomy or ileocolostomy is the procedure of choice. In the transverse colon a cecostomy; in the sigmoid a preliminary colostomy or cecostomy with a Pezzer catheter or the time-honored Mikulicz. The Mikulicz type of operation, while necessitating more operative procedures, lowers the mortality from 10% to 3%. In the lower sigmoid and rectum a preliminary colostomy followed by posterior resection, preferably by method of Coffey, removing the entire lower segment to avoid the possibility of mucus fistula and permit a wider resection is the method of choice.

I wish to call attention to another procedure that Dr. Stratton touches on, which, while still in the experimental stage, is strongly advocated by Rankin as increasing the safety factor; namely, the use of mixed colon and streptococcic vaccine injected intraperitoneally for three days prior to operation. He feels that it has a distinct place in increasing the resistance to infection. My own experience with this method is limited, but I feel that it is distinctly worthwhile.

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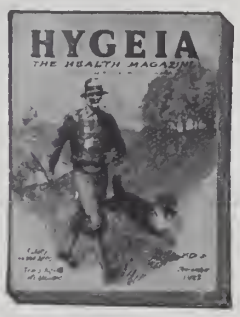

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By E. H. Cary, M. D.
CONVALESCENT SERUM
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ALCOHOLISM
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TABLE OF CONTENTS PAGE 796

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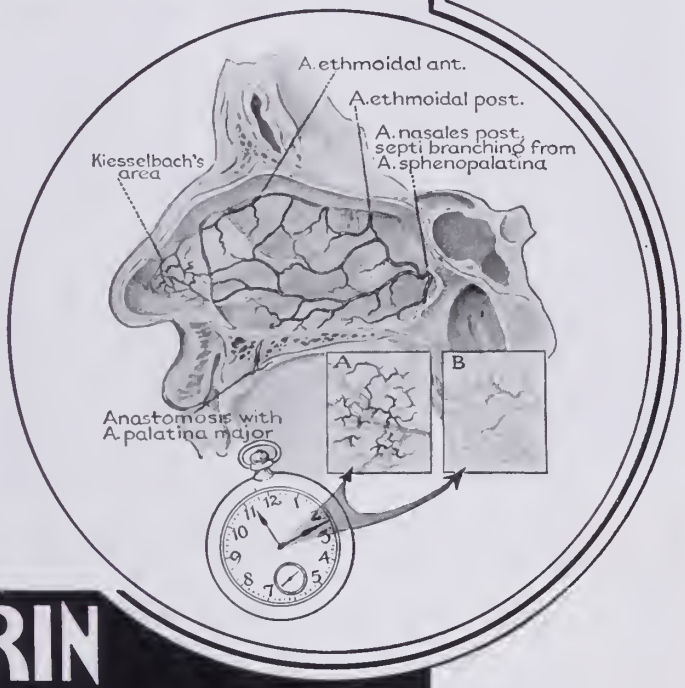

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TABLE OF CONTENTS

ORIGINAL ARTICLES

Page

Controlling Our Destiny by Edward H. Cary, M.D., Dallas, Texas ---- 805
The Use of Human Convalescent Serum in Infectious Diseases by Maurice Hardgrove, M.D., Milwaukee ---- 812
Medicolegal Aspects of Alcoholism by F. L. Kozelka, Ph.D., Madison ---- 816
Diseases of the Colon by F. J. Hodges, M.D., Ann Arbor, Michigan ---- 821
Clinical Conditions Associated with Congenital Anomalies of the Small Intestine by A. H. Montgomery, M.D., Chicago ---- 826
Management of Cataract in the Insane by V. A. Chapman, M. D., Milwaukee ---- 831
Urological Surgery in Children by H. L. Kretschmer, M.D., Chicago ---- 832

EDITORIALS

Hematuria ---- 840
Bills for WPA Compensation Accident Cases -- 841

MISCELLANY

Page

The President's Page ---- 842
Society Proceedings ---- 844
The Woman's Auxiliary ---- 846
News Items and Personals ---- 848
Radio Program ---- 848
Marriages ---- 849
Deaths ---- 850
Society Records ---- 850
Medical Economics ---- 851
Early Efforts of the Wisconsin State Medical Society to Legalize Dissection by William Snow Miller, M.D., Madison ---- 853
Instructions Issued for Submitting Bills to U. S. Employees' Compensation Commission ---- 858
Wisconsin Members Invited to Attend Scientific Program at St. Paul in Connection with Wisconsin-Minnesota Game ---- 860
Getting Sanatorium Care by Wisconsin Sanatorium Superintendents' Association ---- 862
Books Received for Review ---- 864
Book Reviews ---- 864
Exchange Advertisements ---- 869

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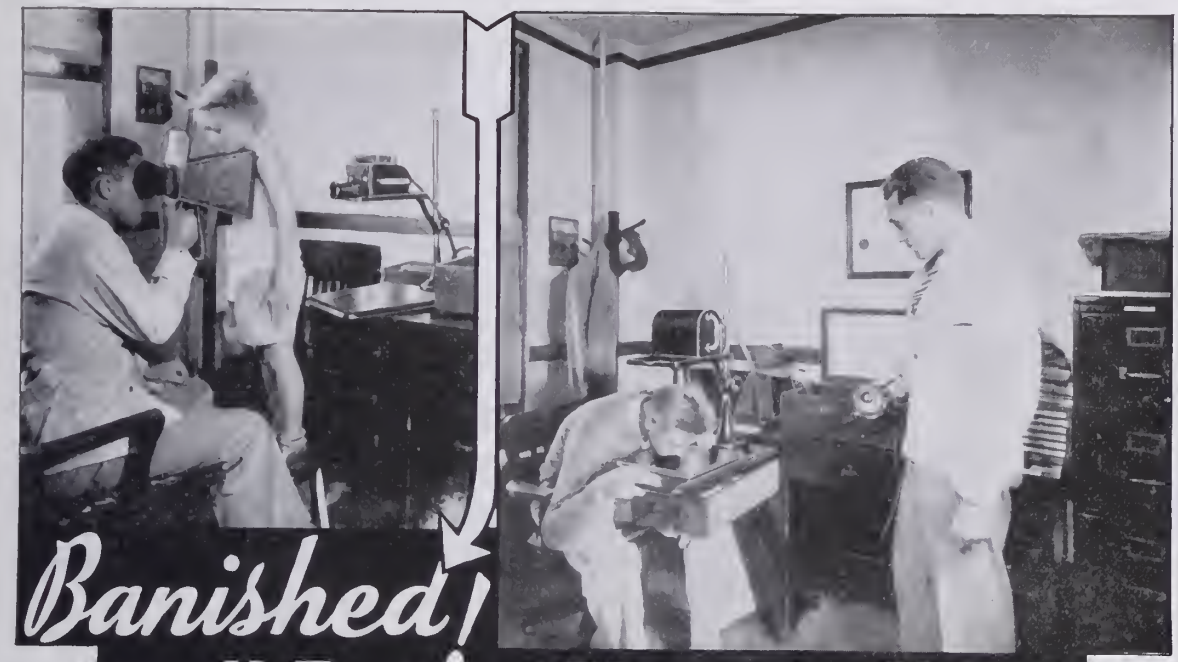

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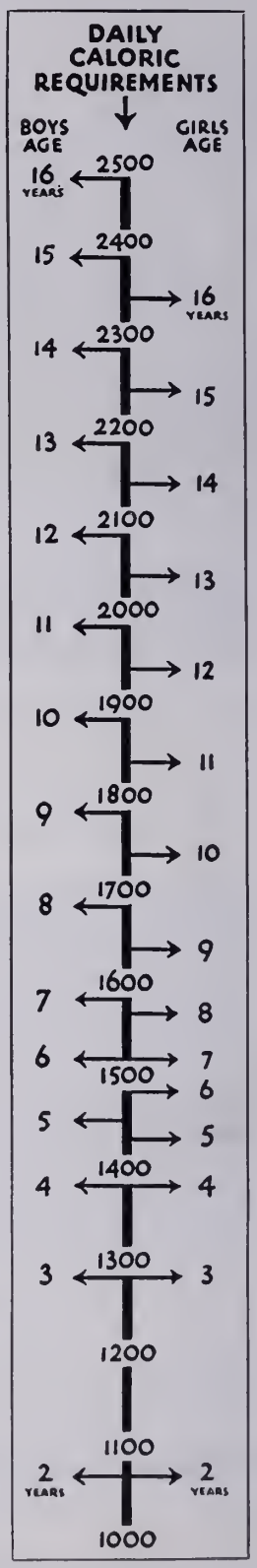

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(1) Journal Nutrition 8, 449 (1934)
Journal American Dietetic Association 9, 295 (1933)
Journal Pediatrics 6, 749 (1932)

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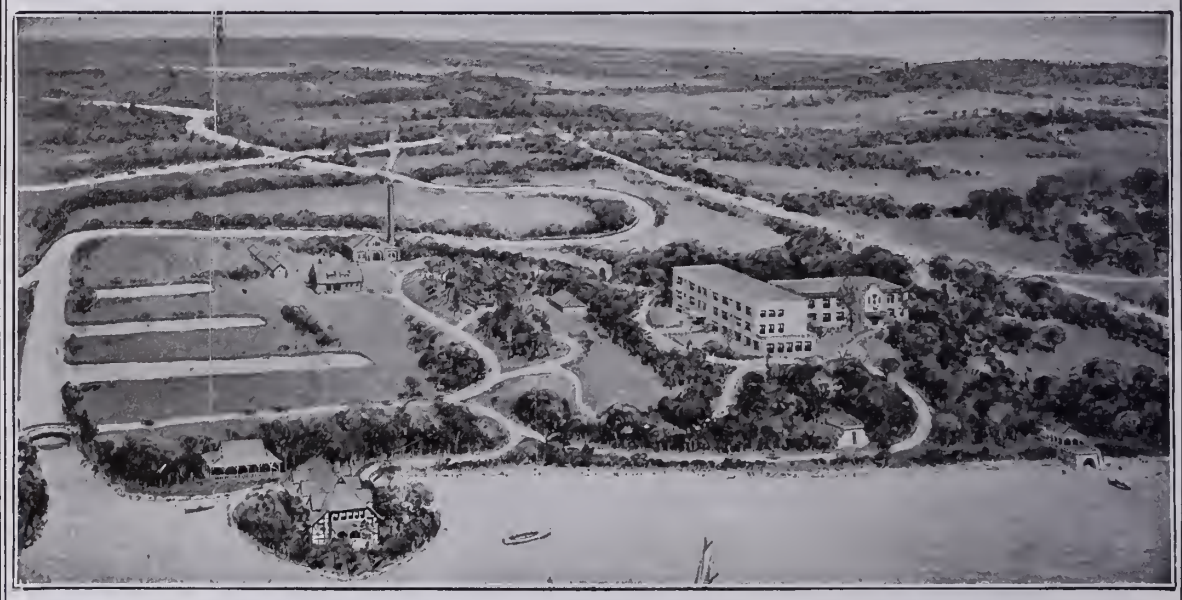

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THE WISCONSIN MEDICAL JOURNAL

Volume XXXIV NOVEMBER, 1935 Number 11

Controlling Our Destiny*

By EDWARD H. CARY, M. D.

Chairman, Committee on Legislative Activities, American Medical Association, Dallas, Texas.

THE invitation from the State Medical Society of Wisconsin to speak to its members and guests upon this occasion was accepted because of my deep interest in your accomplishments. No member of our profession, living out of your state, appreciates more than I the wonderful contributions you have made to scientific medicine and to the consistent and intelligent study of the many problems which concern the profession.

You do not expect to hear anything new tonight, I am sure, but I do hope a re-statement of some of our old points of issue, intermingled with a few remarks of my personal point of view, will prove of interest at this time.

Many years ago a small group in Dallas entertained the distinguished President of the University of Wisconsin. There had been nothing in the newspapers and talk of the times to indicate who had initiated the contemporaneous widely discussed movement to conserve the natural resources of our country. The intense personality of the first Roosevelt had made vivid the crying need of the nation for its people to stop, take stock, and save the rapidly depleting natural resources of our nation.

From the lips of President Van Hise we heard the story, very modestly presented, of how he had sensed this urgent need and subsequently stirred the imagination of the fiery Theodore Roosevelt to the possibilities of the idea.

Your esteemed educator recognized the danger which confronted the country and discussed it with men who were in position to develop the conservation program. He then stepped aside, forgotten as the instigator of the tremendously interesting movement which followed.

Ladies and gentlemen, I recall my admiration for this splendid leader of your people, whose name is not universally enshrined in the hearts of the American people simply because they did not know of his work. Modesty has its own reward, however, for other universities of the agricultural states recognized the character of work being accomplished at Madison and have made progress along similar lines. They have, at the same time, preached the doctrine of conservation of our natural resources.

The standard of living for the agricultural masses has been raised and no one doubts that the universities which have developed knowledge of the soil, plant life and human needs have contributed materially to this fact. We should pay tribute to the men who have toiled so faithfully to bring forth the richest fruits from the soil and who have labored to direct the many forces which have tended to raise the standard of living. Medicine will arrive at its greatest point of usefulness to man when the standard of living has been raised generally so that the application of scientific knowledge will be abundantly placed at his disposal. The natural corollary to such an achievement, of course, will be an improvement in the economic status of the practitioner of medicine.

An effort to conserve the initiative of mankind, to encourage workers by holding out proper reward as the fruit of labor, is essentially within the bounds of ethics of any profession. The ethical standards of our profession emphasize the importance of fairness in the distribution of benefits according to the ability of those who work, whether at manual labor or through the use of their refined intellects. Nature has not provided

* Presented as Address of the Evening, Annual Dinner, 94th Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, Sept. 19, 1935.

universal parity, either of opportunity or ability, nor has it given man the power to understand the realism of the afflictions of the body, unless we provide the opportunity for such understanding.

Medicine can wisely use for comparison the information gained through the study of the soil, plants and plant life. The study of the soil and its changes which are so vital to plant life, has certain influence upon animal life and, finally, upon the economic relationship of man to the soil and to his environment. The knowledge of the anatomy, physiology and pathology, as well as insect carriers and infection which produce disease in plants, only illustrates the similarity of any *Story of Life,* whether relating to plants, lower animals or man.

In Dallas the Texas Centennial has allocated funds and a building, with floor space adequate for a presentation of what we have named *The Story of Life.* Beginning with the early forms of life, the story will follow the sequential development of the sciences. Our knowledge of the basic sciences will be utilized in building thereon the superstructure of the theme, which will elaborate the evolution of knowledge of disease as it pertains to plants, lower animals and man. A simple story touching each phase of life will be unfolded, having as its climax, a portrayal of man-made environment. This feature of the exhibit will make apparent the cooperation of the medical profession with the Department of Public Health in bringing about the many achievements which constitute *man-made environment.* . . all of which can be classified as the direct result of a correct application of scientific knowledge.

Oftentimes men and women who are well educated in the arts have little information of scientific value. Testimonials are easily acquired from famous writers, brilliant lawyers sometime attesting that remarkable medicinal results have been obtained from some "extraordinary cure." There are people who accept claims that beneficial treatment may be derived through the use of new methods of approach to disease, i.e., so-called adjustment to the human framework.

If these members of the lay-public were better educated in the fundamental sciences, they would be more certain of the analogy of cause and effect of disease. On the other hand, ordinary observations of the rural people cause them to recognize pathological changes in plant and animal life, although they may not know the cause. If there could be a widespread recognition of the similarity of disease as it affects plants, lower animals and man, and this knowledge was better correlated in the lay mind, we would see the theory of "mortal mind origin of disease" appreciably handicapped, and, in a short time, forgotten.

PUBLIC EDUCATION

Medical men can well emphasize the importance of fixing clearly in the minds of the people a definite idea of the cause and effect of disease. It would then be more difficult for them to be misled into supporting measures relating to medical care, which may prove detrimental to their own well-being.

Do you not agree that we owe it to ourselves, as well as to the people, to see that what may seem mysterious about medicine is eliminated from the public mind. Will you not admit it would be helpful if there were a more widespread appreciation on the part of the people of what is known, and the difficult road the medical man pursues to learn and apply this knowledge? While we give freely to each other, after all, every physician, to be most useful, must encompass knowledge, must develop wisdom in its application and must individually assume the responsibility of the sick in his care.

This apparent need of and agitation for mass control of natural forces must be properly directed. In the last analysis, if progress in the arts and sciences is to go forward with its power to bless the world, freedom of intellect and freedom of action must prevail.

In speaking of freedom of intellect and action, it is interesting to think of the press, which universally reacts quickly, yea, violently, to anything that smacks of repression. I am in sympathy with such reaction for it is a sad day in any country when the press is hampered by governmental control.

In the course of time, the press has evolved a code of ethics which protects its ideals and the freedom of the thought of the people.

Here and there in journalism, we see a yellow sheet, the conduct of which is contrary to ethical standards, but the intelligent people of the nation recognize and accept the fundamental values attached to freedom of the press.

Who among us would be brave enough to dictate to leaders of the press regarding the conduct of their business and to say what would be feasible for the people to read, and, furthermore, name the policy which eventually would prove best for both the people and the press?

And so, I ask you my friends, why should not the same principle of freedom apply to matters which concern the medical profession as well as to the press?

Medical tradition extends back to a time long before the press was heard of. The history of medicine is intimately associated with efforts to aid the sick and prolong life. It recites many stories of self-sacrifice and competitive effort to write upon the tablet of time a record of advancement in knowledge which could be applied in the interest of mankind—these are ideals relating to the profession of medicine and its association with the people whom it serves. And even as we sympathize when freedom of the press is attacked from any source, similarly, an attempt on the part of the government or lay people to arbitrarily prescribe rules and govern the activities of the profession of medicine should be condemned by the press!

Organized medicine was created chiefly in order to further medical knowledge through orderly educational processes. The evolution of prescribed rules and regulations has encouraged and caused to be established higher educational standards. These have brought into this country, within my time, an almost complete change in medical practice. Knowledge has become universally associated with those who practice the art of medicine, limited only to that degree which constitutes wisdom, and which we all hope will forever be a part of acquired learning in the practice of medicine.

As a profession we have preserved fundamental ethical relations, holding them dear while demanding the privilege of personal or individual interpretation and application of our principles. These rights should not be restricted as long as the devotees of our profession live and act in harmony with the ethics which are worthily accepted and practiced.

INTERDEPENDENT RELATION

We recognize the widespread belief among the people in the integrity and ability of doctors. The physician is built into the present day social system, his knowledge being accepted and lived by. Cultism is not so blind that it often disregards the rules and regulations of the city sanitary code nor the ordinary practices of educated people who have adjusted their habits in harmony with the prescribed regime.

It would seem that the destiny of the medical profession could be directed now, as in the past, by its members if they comprehend its interdependent relation with the prevailing social order. Surely, with a profession so inclined, society must concede the wisdom of self-determination, for who knows better the complexities of medical necessities than the doctors themselves? It is quite apparent to me that organized medicine will continue to command the respect and fulfill the expectations of the people as long as ethical men cling together. It is also true, that divided, our potency for the common good will be dissipated and new evils will multiply. It is conceivable that the marvelous "esprit de corps" in values which now exists would be destroyed. The health and happiness of the individual home, the primary unit of society upon which great cities and mighty nations have been built, has endured because of the correct application of medical knowledge and the spirit of cooperation among medical men. We are expected to safeguard public health by supplying the leadership to direct the application of measures which prevent disease, whether controlled through general hygienic or specific methods. We are willing to cooperate, realizing we cannot isolate ourselves from the many interdependent relations of a complex society; however, while so doing the profession of medicine demands the right to possess an enlightened self-interest in the welfare of its members.

Since we cannot separate ourselves from such responsibilities it is for us to direct the forces which determine the part each individual doctor will play in this drama of medical practice. The people and their servants, the press and political representatives, are assured that in the various localities of this country, an exhaustive effort is being made to solve the problem of the distribution of medical care. We would have the solution serve the best interest of the people and the profession, with the important desideratum retained, . . . personal responsibility of the professional man to his patient.

In the remarkable effort of the government to revamp through codes the guild spirit of old, there was reservation of power to curb greed which readily comes to the surface. An attempt was made to conserve principles but without too close regulation upon the individual. The Supreme Court has nullified much of this effort. However, certain industries have had re-enacted regulations to accomplish the same controlling effect, for example, the coal industry.

How does this match the history of medical experience?

We all agree that society's best interest is protected when the highest quality of professional care is made certain by intelligent effort through cooperation. If the press, or if industry, or if labor, is to have every encouragement to direct its own affairs, *again I ask, shall medicine be treated differently?*

The people of the United States have recognized certain vested rights, some of which are quite natural and worthwhile, such as the practices of law and medicine. The medical profession is protected in pursuing a special field of endeavor. The public welfare is safeguarded if the privilege of service is properly understood by the profession.

Our ethical standards have protected the people from abuse of this privilege, hence our profession is one of the few capable of leadership. Recognition of this fact should remain as long as we sincerely regard the rights of others and make an earnest attempt to alleviate the suffering of humanity.

We want to cooperate; we are willing to aid the forces which control the immediate concerns of man. As a unified profession, however, we refuse to be forced into accepting half-baked conclusions, which, if put into practice, would destroy the evolutionary forces leading to a continued development of knowledge and its application in the service of mankind. When the profession of medicine has strayed from the right path and has become selfish to the extent of injury to the public weal, then people here and there, wherever such injury occurs, will have a just demand for change in professional attitude.

The medical profession of today is altogether unlike the profession which existed in Germany in 1883; it is markedly different from the profession of England in 1912. We are equipped to meet our responsibilities and we demand the right of self-determination in our relations with the people.

We have no contest to make against recent acts of Congress which are directed in many ways to cure the ills of society. As long as the interpretation of these acts harmonizes with the principles which we laid down at our Cleveland meeting and which were re-interpreted at the Atlantic City convention, there will be no opposition from organized medicine.

A TURNING POINT

The Social Security Act as stated by our distinguished President can be looked upon as one of the historical events of the country. It also may be considered by the members of the medical profession as a turning point in the present methods of medical practice. The temptation on the part of a so-called progressive government will be to increase benefits to an ever-enlarging group of American citizens. These greater gratuities may be the result of increased pensions, or enlargements of the function of public health service; or perhaps through the very simple dole of bringing free medical care to the now insured unemployed, which would cause a spread of medical care to many people, irrespective of their ability to pay or willingness to continue selecting their own physician.

We are no longer confronted with theory but with actual facts which implicate many phases of medical service. We realize what we may expect unless a united medical profession can prove the merits of their plan of

practice. We must be able to point to achievements, accomplished through trial and error, which will cause even political representatives to recognize our method of distributing medical care worthy of acceptation by the people.

In this connection, your attention is called to the fact that we are living under a political form of government. A very wise national leader remarked to me that with the support of the doctors and bankers, he could defeat any legislation. Recently in Texas, the dentists were able to get enacted through the state Legislature, a law regulating the character of advertising done by the nondescript practitioners of dentistry. This restrictive legislation, although certainly in the interest of the people, was heatedly opposed by the newspapers in the state. The result of the cooperative effort on the part of the dental profession convinces me that in this political form of government the doctor, utilizing his lay friends and the important auxiliaries to his profession, can if necessary present his case equally as well.

Was there ever in the history of this country a time when medical men should show more interest in their own cause? When they should be more determined to control their own future? When they should be more alert to the fact that medical relationships can be broken down through the undermining influences of widespread gratuities? When they should recognize that such benefits will create greater demands upon the medical profession?

New proposals followed immediately in the wake of the President's announcement of his Social Security program; these were presented in the form of numerous bills in state legislatures and dealt with the problem of distributing medical care to the people. It is to be hoped that our President will see a line of demarcation which will preserve for the American people an untrammeled and enthusiastic medical profession. Without enthusiasm, there would no longer be a desire to make progress in the art and science of medicine. High ideals should be encouraged and nothing whatsoever done to destroy the motivating power to advance medical knowledge through persevering study.

Achievement in the practice of medicine is based upon many factors which go to make a successful practitioner, one of the most important being a profound and untiring interest in the patient and the story he can tell. Anything which lessens this interest in the individual such as the necessity of seeing a large number of patients who, for the most part, have trivial complaints, soon establishes a psychology detrimental to searching inquiry and that individual attention which so frequently saves human beings from catastrophe.

Human nature and its reactions, as they apply to the patient and the doctor, should never be overlooked.

Organized medicine has not lost sight of these factors in formulating its so-called ten commandments on medical economics. The principles which we emphasize are needed to protect the interest of the people as well as the future of the practice of medicine.

I daresay human nature will remain much the same in spite of the laws which are made to govern behavior. The physician, regardless of training and his interest in humanity, in the long run, will render service quite consistent with the law of compensation. Recompense for services rendered is estimated by some in money; by others in the use of material gathered from interesting experiences. Most of us prize highly an expression of gratitude; none of us sleep well if we fail the poor and needy.

CONTINUOUS ADVANCE

The medical profession throughout the United States is experimenting with one hundred and fifty different methods of distributing medical care to all who need assistance in meeting medical necessities. We are trying to evaluate the effectiveness of these various plans, with the hope that voluntary budgeting of medical needs will be so well developed, that the state will never find it necessary to utilize compulsory health insurance methods which have always been the football of politics in any land wherein they are used.

The morbidity and mortality rates on diphtheria seem to offer a fairly sound test of the quality of medical service received by a com-

munity. A conquest of diphtheria has been and still is in process and the methods of achieving victory are known. The date of complete triumph depends on the way in which these methods are applied to the entire population. Diphtheria death rates vary directly with the extent to which these known and tested methods of prevention and treatment are made available to the population.

The arguments for compulsory sickness insurance may be summed up in the claim that such a plan removes the economic obstacles to the giving of medical service, and thereby secures a wider and more effective distribution of that service. The League of Nations has assembled comparative statistics on reported cases of diphtheria occurring between 1923 and 1933 in a number of countries.

I will give comparative statements on three or four countries, using approximate figures:

Germany reported thirty-two thousand cases of diphtheria in 1923; forty-seven thousand cases in 1928; seventy-five thousand cases in 1933. Her population in 1933 was estimated at sixty-six million.

England and Wales reported forty thousand cases in 1923; sixty-one thousand cases in 1928; forty-seven thousand cases in 1933. These countries had a reported population of forty million people in 1931.

Austria reported three thousand cases of diphtheria in 1923; eight thousand cases in 1928; twenty-one thousand cases in 1933. The population of this country in 1933 was estimated at six million, seven hundred and forty thousand people.

The United States reported one hundred forty-seven thousand cases of diphtheria in 1923; ninety-one thousand cases in 1928; forty-eight thousand, six hundred cases in 1933. Our population in 1934 was estimated to be one hundred twenty-six million, six hundred fifty-four thousand people.

The 88 larger cities of the United States had an average mortality on this disease of 2.3% in 1933; compared to 8.0% in 51 German towns; to 8.2% in 118 English towns; to 7.2% in 16 Scottish towns.

It is at once evident from these statistics that variations in the number of cases between countries or in time, within any country, may bear some relation to the existence of sickness insurance. Promptness of treatment with immediate application of recognized remedies determines the mortality.

FUTURE GUIDANCE

An interest in the welfare of human beings has always been a vital force, inspiring the practitioner of medicine to cure the ills and mitigate the sorrow of the people. We cherish the thought that some day our services as physicians will no longer be needed, but who can guide us better now than the leaders from our own ranks whom we choose to interpret our dreams, our labors and our necessities?

It is a generally accepted fact that the sum total of medical knowledge today is too great for any one man to encompass. Yet, one of the strangest spectacles of recent years has been the attempt of the students of social science to deal minutely with the application of medical knowledge. They boldly speak for the people and off-handedly present solutions for problems, which, even after intense study, are perplexing to highly trained and shrewd members of a great profession.

In our zeal to direct our own affairs, we also have in mind an advancing army of investigators in collaboration with our clinicians, who are searching for truth and dispelling the mysteries surrounding diseases which affect mankind. While doing this, it is quite evident we have lost sight of our ability to command and control certain influences which shape our destiny. When confronted with a misinterpretation of our ideals, we must go directly to the source of trouble. When positive of the active person, we can, through contact with those in control of his resources, bring definite pressure to bear in curtailing his socialistic operations.

Sociologists who take upon themselves the burden of our destiny, live usually upon the accumulated wealth which, through the tender emotions of some philanthropist, has become a nest-egg to be used in the interest of humanity. Directors of such funds, ordinarily, are extremely busy gentlemen, in sympathy with the general purposes underlying the idea, but without knowledge as to

what is best for society. What then is more natural but for them to turn to some outstanding gentleman who has gained fame through his writings or astute use of the press? Once employed, this individual finds himself in a place, which, because of environment and unlimited resources, becomes a position of powerful influence. Without close supervision as is frequently the case, these gentlemen evolve into propagandists and philosophize with the earnestness of fanatics. Any mild opposition only incites the propagandist to greater effort.

As a result, the press of the country is supplied with a tremendous amount of material, which makes it appear to those who read the daily papers that the force behind the "movement" is mighty and unconquerable.

With a little prescience on this problem, members of our profession who are willing to use their skill as diagnosticians, can unravel the background of this tempest of information. Within will be found truths and half-truths, colored certainly to accomplish the desired purpose which a highly intellectual propagandist has determined to be the best course for a profession and the people.

As indicated previously, in order to check this deluge of propaganda, it is necessary for some member of the profession to seek the controlling force which is usually in the background. In most instances, a director or trustee of the *Foundation* who has lost sight of the misleading activities of their agents, welcomes the information which we are able to supply.

With unity of spirit and the cooperative capacity of our profession, we can put an end to the misapprehension which has been created. We can set aside the motivating agents and neutralize the effects of this propaganda upon the readers of the nation, who, after all, constitute the so-called social attitude, which attitude is man-made and not inevitable in its propulsive impulses.

Sociologists maintain that attitude is a determining factor in the final disposition of all problems which relate to the welfare of man. Great significance has been attached to this question of attitudes and they are often made to appear as inevitable trends, created somewhere not to be definitely diverted by the act of man. However, to me it would seem very simple to think of the attitude held by society concerning any question, as being man-made and easily traceable to the originator. It would also seem that an intelligent group, interested and understanding the question, could re-direct attitude, and, in the end, determine for society that which is truly best for all.

Regardless of what has been accomplished in their behalf, the American people are apparently determined to experiment and will continue to seek solutions for problems which bring social unrest. There are many extremists who would have the government assume responsibilties which have heretofore belonged to the individual; on the other hand, there are members of a large minority who question the wisdom of governmental aid in solving the problems which beset us.

I shall not dwell upon the weakness of man nor his apparent willingness to avoid the "quid pro quo" of the law of compensation.

Our energies must not be expended in criticism unless it be constructive in nature. In truth, it is time for real leadership to be asserted in every profession. If the wisest men of the various professions are social-minded, they will conserve the social contacts which are needed to preserve for this country the values so inherent in individualism. These leaders should know how to successfully guide the present current, which, for a considerable time, has tended toward the *left*. We devoutly hope within a short time to see a termination of this dangerous flow which would engulf progress by destroying individual responsibility.

Social-minded well-wishers of the people's welfare should be sure of their philosophy when they attempt to impose it upon a great profession, which has an illustrious history of unselfish service. We admit a consuming desire to shape our own destiny even while guarding the health and happiness of the people whose physical welfare is our responsibility.

The Use of Human Convalescent Serum in Infectious Diseases*

By MAURICE HARDGROVE, M. D.
Physician-in-Charge, The Milwaukee Serum Center, Columbia Hospital, Milwaukee

HUMAN convalescent serum has been known to be of value in the prevention and treatment of various infectious diseases since the latter part of the last century. The danger of transferring syphilis was one to be feared until von Wassermann, in 1906, developed a reliable serological test for the disease. Since then human convalescent serum has been used with safety when available.

A serious handicap has been the difficulty in procuring an adequate supply of serum prepared in a satisfactory manner. Authorized serum depots, able to prepare and store large amounts of convalescent serum, were not developed in this country until recent years. One in Detroit under the City Health Department has been in existence for a period of ten years. Another, located at the Michael Reese Hospital in Chicago has been in operation during the past five years.

A center for the collection, preparation and distribution of human convalescent serum was established in Milwaukee in February of 1935. This was made possible through the gift of grateful parents, whose child, ill with scarlet fever, received immune serum and recovered. The father at first offered to help the Chicago center which had served him so well. Dr. Thalhimer, the head of the Chicago center, suggested that a center be established in Milwaukee, inasmuch as his center was already self-supporting. Through the cooperation of Dr. Koehler, the Milwaukee Health Department, the Directors of Columbia Hospital and the efforts of Dr. Thalhimer (advisory director), the Milwaukee Serum Center has been active during the past spring and summer. It is a non-profit-making organization. Its personnel, when in full activity, consists of a part-time physician, a full-time technician, *a diener* and a part-time secretary.

Convalescent serum is obtained from two sources in Milwaukee. The names of recently recovered patients are obtained from the City Health Department. The family physician is asked over the phone to confirm the diagnosis and for his permission to request the patient to furnish a small amount of blood. If the patient is willing, he comes to the center by appointment, and two hundred and twenty-five cubic centimeters of blood are obtained by vena puncture, for which he is paid a fee. South View, a municipal contagious hospital, is another source of obtaining blood from scarlet fever convalescents.

The serum is removed aseptically after the blood has clotted and been centrifuged. Ninety cubic centimeters of serum are obtained from the two hundred and twenty-five cubic centimeters of blood withdrawn. Twenty to thirty individual specimens of serum are pooled after serological and bacteriological tests are found to be negative. The pooling mixes the blood groups and combines the effectiveness of antibodies developed in the various cases.[1] When pooling is complete, the serum is passed through a Berkefeld filter and vialed. After additional sterility tests are completed the serum is ready to be dispensed through the family physician. Advice as to its use is gladly given by the physician in charge of the center.

SCARLET FEVER

In scarlet fever, the blood is obtained from the patients after the eighteenth day of illness until the end of the fourth month of convalescence. It may be taken more than once from each donor. The scarlet fever immune serum is of value in both the prevention and treatment of the disease. It transfers a passive immunity lasting from ten days to two weeks. A susceptible person remaining in continuous contact with a patient having scarlet fever must, therefore, receive re-

* Presented before 94th Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, Sept. 1935.

Chart I

PROPHYLACTIC ADMINISTRATION OF SCARLET FEVER IMMUNE SERUM

(120 contacts—6 unreported)

Days after exposure serum given	Number of cases	No disease in 14 days	Disease after 14-day period
1 to 5	96	96	2–1 month later (mild) 2–6 weeks later (mild)
5 to 10	8	8	
Unknown time of exposure	10	10	
Total	114	114	4 after 1 month (mild)

Chart II

THERAPEUTIC ADMINISTRATION OF SCARLET FEVER SERUM

(78 total—9 unreported)

Severity of Disease	Number Cases Treated	Striking Improvement (1–12 hrs.)		Noticeable Improvement (48 hrs.)		No Noticeable Improvement		Complications Developed After Serum		Deaths
		*1st 3 days	after 3 days	1st 3 days	after 3 days	1st 3 days	after 3 days	1st 3 days	after 3 days	
Mild	10	6	1	3						0
Moderate	32	23	2	7				1 (s)		0
Severe	14	10		1	2	1		3 (s)		0
Complications present before serum	13	5	3	3	1	1				0
Total	69	44	6	14	3	2		4		0

* Time after onset serum was given. (s) sinusitis.

peated doses. Ten cubic centimeters is usually adequate for children under ten years of age, and twenty cubic centimeters for children over ten years of age and for adults. The intramuscular route is satisfactory.

Chart I* shows the result of one hundred and fourteen injections of scarlet fever convalescent serum given to home contacts, whom the family physician regarded as being susceptible to scarlet fever. It will be noted that out of the one hundred and fourteen cases so treated, none came down with scarlet fever in the fourteen-day period. Four did come down with a mild form of the disease after a period of one month; two at the end of four weeks and two at the end of six. One case, a nurse, who had received convalescent serum four weeks previously, and feeling that she was amply protected, went out on a second case of scarlet fever where she developed the disease within five days. It must be understood that the scarlet fever epidemic was dying down when the center began its activity, and that out of the total of one hundred and twenty injections the results of six were not reported to us.

In the treatment of scarlet fever, the serum should be given early, intravenously and in adequate doses. The following dosage is recommended:

	Moderate cases	Severe cases
Infants	20 cc.	20–40 cc.
Children	20–40 cc.	60 cc.
Adults	40–60 cc.	80–100 cc.

* The results recorded on all charts except No. III are obtained from follow-up cards sent to the physicians using the serum from The Milwaukee Serum Center.

Chart III
COMPLICATIONS IN SCARLET FEVER[2] [3]

TYPE	UNTREATED CASES		TREATED CASES (convalescent serum)	
	6282 Hosp.	5742 Hosp. (Fox)	947 Hosp.	983 Homes
Cervical Adenitis	27.0	22.0	10.6	9.5
Mastoiditis	2.9	1.05	3.6	0.8
Hemorrhagic Nephritis	3.6	1.4	0.6	0.2
Arthritis	2.6	4.5	2.1	0.5
Total	36.1%	28.95%	16.9%	11.0%

A reduction of the fever, toxemia, angina and rash is usually seen after its use. As a rule, rapid improvement is noted within twelve to eighteen hours even in the severe toxic cases.

Chart II shows the result of the use of scarlet fever convalescent serum in sixty-nine home treated cases. Out of a total of seventy-eight, the results in nine were not reported to us. It is to be noted that most of these cases were of moderate severity. The majority of cases receiving serum within the first three days of the disease showed striking improvement within twelve hours. The subjective improvement of the patient, which occurs within six to twelve hours after the injection of serum, impresses one more than the drop in temperature.

Apparently the duration of the illness is diminished and the complications are reduced one-half when serum is given early. When it is given late in the disease or in complicated cases, larger doses are necessary. Chart III shows a comparison of the number of complications occurring in scarlet fever patients receiving no serum as compared with those receiving serum before complications set in. The results shown on this chart are those obtained by Hoyne, Levinson and Thalhimer[2], and Fox.[3]

MEASLES

The blood used for the preparation of measles convalescent serum is obtained from the end of the second week to the end of the second month of convalescence. In children who are undernourished or who are suffering from some other illness, an attempt should be made to avoid measles. If measles immune serum is given to children within five days after exposure to the disease, it will prevent measles in the majority of contacts.[4] If the use of serum is delayed until the eighth day of exposure, attenuation of the disease usually occurs, and in healthy children this is to be desired, for even if the disease is mild it leaves a permanent immunity.[5] The serum has also been used to stop the spread of the disease in institutions.[6, 7]

Chart IV (A) shows the results of treating measles contacts with adequate doses of serum. Only three out of twenty-nine cases intimately exposed in the home came down with measles. One mild and two moderate cases were noted.

Chart IV (B) shows the result of prophylactic administration of measles convalescent serum when it was given in doses below those recommended. Nine out of eighteen contacts came down with mild measles, and one with moderate. Out of a total of forty-seven home-exposed measles contacts receiving serum, thirty-four developed no disease, ten contracted a very mild form (attenuated) and three moderate. Out of a total of sixty-seven home-exposed measles contacts, fourteen cases were not reported. Six were partially reported, two of which developed no disease, three mild and one moderate.

The dosage recommended for the prophylaxis of measles is as follows:

Infants and children under three years ..... 5 cc.
Children over three years ..... 7.5 cc.
Adults ..... 10 to 15 cc.

Chart IV

PROPHYLACTIC ADMINISTRATION OF MEASLES IMMUNE SERUM

A: Recommended Dosage; based on age and date exposed. (see paper)

*Day exposed	Number of cases	No disease	Mild disease	Moderate disease	Severe disease	Complications	Deaths
1	7	7					
2	5	5					
3	2	1		1			
4	1	1					
5	4	3	1				
6	3	3					
7	1	1					
8	4	4					
9 plus	2	1		1			
Total	29	26	1	2	0	none	none

* Day after exposure that serum was given.

Chart IV

PROPHYLACTIC ADMINISTRATION OF MEASLES IMMUNE SERUM

B: Below recommended dosage. (see paper)

Day exposed	Number of cases	No disease	Mild disease	Moderate disease	Severe disease	Complications	Deaths
1	5	4		1			
2							
3	1		1				
4	3	3					
5	1		1				
6	1	1					
7							
8	6		6				
9 plus	1		1				
Total—B	18	8	9	1	0		
Total—A	29	26	1	2	0		
Total A&B	47	34	10	3	0	none	none

Out of a total of 67, 14 were not reported; and of 6 partially reported, 3 were mild, 1 moderate and 2 had no disease.

POLIOMYELITIS

The general opinion at present is that poliomyelitis is caused by a virus. Since 1910 it has been known that convalescent poliomyelitis serum will neutralize the virus when both are incubated in vitro. Convalescent serum has been used extensively for the treatment and prevention of infantile paralysis, but there is still a variance of opinion as to its value.[8] If it is to be used in therapy it should be given early in the preparalytic stage, both intraspinally and intravenously.[9]

Convalescent serum has also been used for the protection against mumps,[10] chicken pox[11] and German measles,[7] as well as in the treatment of whooping cough,[12] typhoid fever[13] and various streptococcic infections.[14] Fresh human serum is apparently a valuable addition to the serotherapy (commercial antiserum) of meningococcic meningitis.[15]

Over eight hundred vials of serum prepared by the Milwaukee Serum Center have been used in Wisconsin and elsewhere, and I have heard of only six so-called reactions. Two patients developed mild urticaria three weeks after receiving the serum. Four patients developed a sudden rise in temperature immediately after the serum was given, which calls attention to the fact that certain precautions should be taken when the serum is given. It should be warmed in a water bath to body temperature (overheating will coagulate the serum and make it unsuitable). It should be injected slowly. If given intravenously, the syringes should be chemically clean and sterile (boiled in distilled water in a clean basin). More prompt results are obtained by intravenous therapy, but the precautions must be strictly followed.

At a meeting in April, the Milwaukee County Medical Society's Health Council approved the Milwaukee Serum Center as an "ethical, scientific institution, producing various reliable serums." Dr. George W. McCoy, Director of the National Institute of Health of the United States Public Health Service has inspected the center and granted a federal license to it. By arrangements with the airway and railway express, rapid delivery of serum is possible to all parts of Wisconsin, and the adjoining states.[16]

(I am indebted to Miss Phillis Frederick, technician of the Serum Center, for assistance in the collection of statistical data.)

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Medicolegal Aspects of Alcoholism*

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THE tremendous increase of automotive traffic, with its greater speed, and, consequently, greatly increased potentialities for serious accidents, has thrown on the physician many more problems and greatly increased responsibilities in connection with the diagnosis of acute alcoholic intoxication and the determination of the relationship between the degree of intoxication and the actions of the individual. The diverse opinion of the investigators of the problem of alcoholism as to what constitutes drunkenness seems to center about the lack of a clear-cut definition of the term. Carlson[1] suggests that "alcoholic intoxication" should be defined as that degree of intoxication at

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which the individual becomes a nuisance or a danger to his fellowmen.

The police courts have repeatedly maintained that the recognition of drunkenness is a simple matter because of the readily discernible symptoms, such as the odor of alcohol, dilated pupils, flushed face, staggering gait, confused thick speech, tachycardia, and boisterous, euphoric or abusive behavior. A person, however, may be under the influence of alcohol to an extent that seriously affects his faculties and behavior, especially in such a responsible position as driving an automobile, without exhibiting these commonly recognized symptoms of drunkenness and, conversely, an individual may exhibit any or all of these symptoms without being under the influence of alcohol, particularly after a severe shock as would occur in an automobile accident. Likewise, there are many individuals who have some acquired or congenital defect, or pathological condition, who continually exhibit some of the characteristics of alcoholic intoxication. As examples, one may cite individuals afflicted with neurological conditions which may cause ataxia, stuttering or stammering, or cases of vasomotor instability or acute febrile disturbances, which may cause dilated pupils, flushed face, tachycardia or tremors.

To be sure, the differentiation between all of these conditions and acute alcoholic intoxication may be made readily by the trained clinician in the majority of instances, but it is not always so easy for the medically untrained peace officer, especially in the borderline cases in which the symptoms exhibited are doubtful. In such instances, the alcoholic odor of the breath cannot be used as a criterion of the degree of intoxication because the intensity of the odor does not increase with the amount of alcohol ingested.

A chemical examination of the urine or blood will, however, definitely establish whether alcohol has or has not been taken and approximately how much has been ingested. This test is of special value in cases where the individual continually exhibits some of these symptoms, because of some congenital or acquired defect, and has imbibed enough alcohol to give the characteristic alcoholic odor to the breath but not a sufficient amount to affect his faculties. Under the present methods of diagnosis, such an individual might be adjudged intoxicated. On the other hand, an individual imbibing a sufficient amount of alcohol to materially affect his reflex actions, but not enough to produce the more obvious symptoms of intoxication, might be declared sober. Such occurrences may be encountered frequently among automobile drivers. A drunken driver may exhibit marked signs of depression if left alone; however, a sudden stimulus, such as may occur in an automobile accident, may be sufficient to overcome to a certain extent the depressing effect of the alcohol, and the individual may appear fairly normal. It is a recognized fact that any strong stimulus tends to overcome depression.

During the past year, many specimens of stomach contents or vomitus have been submitted to this laboratory for examination, from individuals involved in serious automobile accidents or from persons dying suddenly, in which alcohol was suspected of being the cause of death. While the establishment of the presence or absence of alcohol in such material is of value in demonstrating that alcohol has or has not been taken, nevertheless the data obtained are worthless in estimating the degree of intoxication, since the alcohol present in the stomach must still be considered as being outside of the body. An accurate determination of the concentration of alcohol in the tissues or body fluids is the only satisfactory means of ascertaining the degree of alcoholic intoxication. Numerous experiments and clinical observations are on record which indicate that alcohol, like most other drugs, produces toxic effects in direct proportion to the quantity of the substance in the tissues and body fluids.

It has been demonstrated that alcohol taken by mouth is rapidly absorbed; reaches its highest concentration in the blood within an hour after ingestion, the concentration then gradually diminishing as the alcohol is oxidized and excreted. The rate of oxidation is approximately 10 cubic centimenters per hour for the average individual, and less than 10 per cent is excreted by way of

the lungs and kidneys. Newman and Cutting[2], working with two human subjects, found that they metabolized 0.167 cc. and 0.179 cc. per kilogram per hour, respectively, and that the rate of metabolism proceeded at a constant rate regardless of the concentration in the blood stream. The highest concentration attained is approximately the total amount of alcohol ingested, divided by the total weight, and if given in sufficient amount, will soon produce the characteristic subjective and objective effects.

The reliability of using the results obtained from an analysis of the various body fluids, as an index of inebriety, has been the subject of a considerable amount of research. Those most commonly used are the blood and urine. Most investigators believe that the spinal fluid should yield a more reliable index because the concentration of alcohol in the spinal fluid should closely approximate that of the brain, and consequently reflect the degree of inebriety. In support of this contention, Gettler and Freireich[3] showed, in a series of cases coming to autopsy, that there was a more constant relationship between the alcoholic content of the brain and spinal fluid than between the brain and the blood, and suggest the use of a series of spinal fluid-brain ratios, ranging from 2.5 to 1.1, for estimating the amount of alcohol in the brain of living individuals, depending upon the concentration of alcohol found in the spinal fluid. If the concentration of alcohol in the spinal fluid is 0.03 to 0.1 per cent, the result is divided by 2.5 to estimate the amount of alcohol in the brain. If the concentration in the spinal fluid is 0.5 to 0.7 per cent, the result is divided by 1.1. They determined that the spinal fluid values more nearly approach those for the brain as the quantity in the latter organ increases. They also found that the alcoholic content of the blood cannot be correlated with that of the brain, being higher in some cases and lower in others. These data, however, throw little light on the problem, because the time intervals between the last imbibitions of alcohol and the determinations were not known, and evidently the wide variation found was due to the stage of absorption at which death occurred. The relationship of the alcoholic concentration of the spinal fluid (obtained by lumbar puncture) and the blood, was determined by Schumm and Fleischmann[4], Abramson and Linde[5], and Gettler and Freireich[3]. They demonstrated that the alcoholic content of the lumbar fluid rises more slowly than that of the blood, and, during the period of decline, the alcohol in the spinal fluid remains higher than that in the blood.

Mehrtens and Newman[6] corroborated these findings by single intravenous injections of alcohol. They observed that the curve of the alcohol level of the spinal fluid obtained by lumbar puncture attains the height of the diminishing alcohol level of the blood in about 80 minutes, reaches a maximum less than that of the blood, and during the period of decline remains higher than that of the blood. In the series of seven subjects investigated, the curves for the alcohol levels of the blood and lumbar fluid crossed between 80 and 120 minutes after injection. The signs of drunkenness in no way showed the lag that one might expect from the slow rise in the alcohol level of the lumbar fluid. The subject was invariably more intoxicated, judging from the actions and subjective symptoms, at the end of the injection when the alcohol of the blood was at its maximum than when the lumbar fluid reached its maximum. On the other hand, they found that the alcohol in the cisternal fluid rises promptly and closely approximates that in the blood. From their observations, they concluded that alcoholic content of the cisternal fluid is a better index of intoxication than that of the lumbar fluid, while that of the blood is probably the best of all. Apparently an analysis of the spinal fluid has no particular advantage over the analysis of the blood.

URINE ANALYSIS

Blood samples are often difficult to procure and the question arises as to whether an analysis of urine gives as good an indication of intoxication as the alcoholic concentration in the blood. Miles[7] found that, during the first 20 or 30 minutes after ingestion, the urine alcohol is about the same, or a little higher, than in the blood: then for

one hour or more it is 35 to 50 per cent higher. Southgate and Carter[8], working with human subjects, found that the ratio of alcoholic concentration in the blood to that in urine varied between 1.34 and 1.4 after one-half hour. The mean concentration ratio after one hour was 1.35. They also observed that this ratio is not changed if the alcohol is taken on an empty stomach or preceded by the ingestion of food. Subsequent diuresis also did not alter the ratio. These results indicate that, from a practical standpoint, the analysis of urine is almost as satisfactory as of blood in estimating the degree of intoxication.

Haggard and Greenberg[9] studied the solubility of alcohol in urine and blood and found that alcohol is more soluble in urine than in blood; the ratio of distribution at body temperature was 1.0 for the blood and 1.144 for the urine. They found the same distribution of the alcohol, after ingestion between arterial blood and urine obtained by catheterization. The apparent discrepancy between the results of Haggard and Greenberg and those of Miles and of Southgate and Carter, is due undoubtedly to the fact that the former investigators obtained their urine specimens by catheterization, and their ratio represents the distribution of alcohol between the two fluids at the time the urine was excreted and would be comparable to the ratio found during the first half hour after the alcohol was ingested. However, during the period (one to two hours after ingestion of alcohol) when the alcoholic concentration in the blood is decreasing, the ratio increases if the urine is permitted to accumulate in the bladder. This latter ratio was found by Miles and by Southgate and Carter.

The relationship of the concentration of alcohol in the urine to the degree of intoxication of the subject was strikingly demonstrated by Bogen[10] who had the opportunity of observing 500 cases and correlating the symptoms, upon which the clinical diagnosis is usually based, with the alcoholic concentration in the urine. Those with an alcoholic concentration in the urine of 0 to 1 mg. per 1 cc. included not only a number who had not taken any alcohol but some who had imbibed small quantities. Forty per cent had the odor of alcohol on their breath but only a few showed the flushed face, dilated pupils, unsteady gait, or slurred or confused speech of alcoholic intoxication. In none was the combination of symptoms sufficiently marked to justify a diagnosis of drunkenness. In the group having an alcoholic concentration in the urine of from 1 to 2 mg. per 1 cc., the diagnosis of "acute alcoholic intoxication" was made in over 50 per cent of the cases. The group having a concentration of from 2 to 3 mg. of alcohol in 1 cc. of urine showed an increase in the incidence of nearly all the symptoms of alcoholic intoxication. Fifteen per cent of these individuals were either in an alcoholic coma or were unable to stand or walk. The group having a concentration of from 3 to 4 mg. of alcohol in 1 cc. of urine contained only a few individuals who were not unmistakably intoxicated in the sense of the term, drunkenness. Above 4 mg. of alcohol per 1 cc. of urine, practically all the cases were in a state of alcoholic coma — the traditional "dead drunk." This level of alcohol approaches the lethal dose. These stages are well illustrated in Emerson's book on alcohol[11].

Heise[12] studied the effects of small amounts of alcohol and found a measurable loss of efficiency and judgment in the operation of a typewriter even when the concentration of alcohol in the urine or blood did not exceed 0.02 per cent. In another series of experiments, he tested the effect of alcohol on automobile drivers and found that, without exception, these subjects were able to pass creditably the ordinary tests used to determine drunkenness and were able to perform the routine actions involved in driving. However, he found a definite variation from the normal in actions that had not become a habit, such as the avoidance of obstacles, backing the car, or any unusual action from one that was routinely used. In none of these subjects did the alcoholic concentration of the urine exceed 0.1 per cent. These results are in close agreement with those obtained by Carlson[1] who observed some functional impairment when the concentration of alcohol reached 1.17 mg. per cc.

THE CRITERION

Turner[13], on the other hand, concludes that an individual is not intoxicated until the concentration of the alcohol in the blood ranges from 2 to 3 mg. per cc. However, he does not consider an individual intoxicated unless he is unable to talk and walk normally. If one is to subscribe to this interpretation, then a driver would not be adjudged intoxicated so long as he was able to stand, and no cognizance would be taken of his impaired faculties. Absolute helplessness should not be the criterion upon which we should convict a person indicted with operating a motor car while under the influence of intoxicating liquor. Other factors of the case being equal, the criterion should be whether or not he varies in a sufficient degree from his normal mental or physical state, as a result of the consumption of intoxicating beverages, to make him a menace to society.

The contention that reaction time is lengthened and that the psycho-physiological functions of importance in motor car operation are impaired before the characteristic symptoms of intoxication are apparent, is further corroborated by Bahnsen and Vedel–Petersen[14]. In their experiments on drivers of motor vehicles, they observed that alcohol tended to lower the grade of performance when 97 cc. of whisky was ingested. In this subclinical stage, when there is 1 mg. or less of alcohol in each cc. of blood, the changes produced in most cases are so slight as to be readily overlooked except by a very careful observer. Nevertheless, the effect is manifested in a blunting of the finer judgments and of observation, and usually results in a feeling of euphoria and increased confidence in one's ability, both physical and mental.

It is a matter of common knowledge that the person accustomed to the use of alcohol can drink more and show less symptoms of toxicity than the person not so accustomed, although the mechanism of this phenomenon is not understood. It is commonly believed that a chronic alcoholic can tolerate a higher concentration of alcohol in the blood or tissues without exhibiting symptoms of intoxication. This belief, however, is not supported by experimental data. Pringsheim[15], working with rats and rabbits, found that habitués burn up the alcohol much faster (approximately two-thirds of the time) than normal animals; that normal animals reach a 66 per cent higher content of alcohol in the blood than habitués; that normal animals oxidize the same amount of alcohol each hour, while in habitués the oxidation is accelerated each succeeding hour. He also found that normal animals absorb 20 per cent more alcohol in the first two hours than do the habitués. The greater absorption and the lower oxidation are reasons why the alcoholic content of the body rises to a higher level in normal animals. Schweisheimer[16], investigating the alcoholic content of blood in human alcoholics and normal individuals, corroborated Pringsheim's results with animals. His results show that the maximum alcoholic content is higher in normal persons; that it reaches this maximum in from one and one-half to two hours, remains at this level for five hours, and then gradually diminishes, while in alcoholic persons it reaches its maximum more quickly, remains at the level for two hours and then subsides much more quickly. He concludes that tolerance is due to the decreased maximum alcohol zone which depends on a more rapid oxidation. He could find no proof of increased resistance toward alcohol. In general, similar results were obtained by Gettler and Freireich[17] with dogs. They poisoned dogs by daily administration of alcohol for periods ranging from six months to two years. In all cases (poisoned and normal dogs), intoxication (disturbed equilibrium) set in when the alcoholic content of the brain reached 0.25 per cent. They found, without exception, a smaller alcoholic content in the tissues and body fluids of chronic alcoholic dogs as compared to normal dogs, and concluded that the lower concentration is due to increased destruction of the alcohol by the tissues and that increased tolerance is due to more efficient oxidation. These data indicate that tolerance to alcohol consists mainly of the increased oxidation rate of the alcohol absorbed, but that the individual is always affected to about the same degree by the same concentration of alcohol in the blood, regard-

less of his previous habits or total amount of alcohol drunk.

Since the concentration of alcohol in the urine and the blood is so consistently related to the degree of acute alcoholic intoxication and the consequent behavior of the individual, regardless of his previous habits, and since the diagnosis of drunkenness from the clinical condition alone is open to many criticisms and difficulties, a quantitative determination of the alcohol in urine or body fluids offers the only accurate solution to the problem of the diagnosis of alcoholism. It is not expected that this test should supersede entirely all the other clinical examinations, but should be interpreted in the light of all the other observations in the case. However, it can well be concluded that the alcoholic concentration in the urine and body fluids is the most reliable single factor in arriving at a correct conclusion as to the degree of intoxication of the individual, and intoxication should be defined more in terms of alcoholic content in the blood than in the ability to walk.

SUMMARY

From the available data it seems safe to conclude that:

1. The clinical evidence alone is not an adequate criterion for the diagnosis of the degree of alcoholic intoxication.

2. Tolerance to alcohol is due to more efficient oxidation and not to any increased resistance to it, i.e., the ability to tolerate higher concentrations in the blood and tissues without exhibiting the characteristic symptoms of intoxication.

3. The psycho-physiological manifestations are directly related to the alcoholic content in the blood, regardless of the previous habits of the individual.

4. There is a definite decrease in reaction time and loss of efficiency at lower levels of alcoholic concentration in the blood than is required to produce the characteristic symptoms of drunkenness.

5. There is a definite relationship between the alcoholic concentration in the blood and the urine which is not altered by the rate of absorption or the degree of diuresis.

6. The determination of the alcoholic content of the blood or urine offers a means of estimating the alcoholic content of the other.

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Diseases of the Colon*

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TO THE roentgenologist, the disease entities to be considered in the examination of the large bowel are relatively few in number, limited as they are to those which produce recognizable changes in contrast material within the gut lumen. Eager as he may be to widen his field of usefulness, the present stage of development within his specialty rigidly confines his study to this group. This state of affairs need not be considered altogether discouraging, however, for when, after thoroughgoing search, x-ray can assert that from its viewpoint the colon

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appears normal the physician in charge of a given case can with reasonable conviction dismiss from further consideration most of the really serious possibilities presented in the differential diagnosis.

Analyzing the records of all cases subjected to roentgen examination of the colon at the University Hospital in the twenty-seven months ending July 1, 1934, one finds that in round numbers 70% presented no discoverable evidence of abnormality (Table I). While it is idle to assert that this group harbors no diagnostic errors, since in the vast majority no subsequent proof has become available, it is of interest that few significant mistakes have come to light. One is led to assume therefore that in the main no colonic disease existed despite the suggestive symptons which occasioned the examinations or that the group includes only those colonic disorders unrecognizable by x-ray methods of study.

If one examines the remaining 30% of these case records he finds that one-half represent what one may term miscellaneous conditions no one of which occurs with sufficient frequency to warrant separate listing. Excluding all cases reported as normal and the above miscellaneous group as well, the remaining 15% of the entire total may be listed in the following order of increasing frequency of occurrence:—

Frank anomalies of the colon
Tuberculous colitis
Chronic ulcerative colitis (bacillary and amoebic)
Postoperative deformities
Diverticulosis (with and without associated inflammatory disease)
Colonic neoplasm.

The last mentioned group represents 5.3% of the entire series of cases examined; one-fifth of all cases in which abnormal findings were reported. Colonic malignancy, on the basis of this experience with 2380 consecutive cases subjected to x-ray examination of the large bowel, is to be expected in one of every twenty patients presenting symptoms of colonic disorder. The present discussion therefore may logically be limited to the further consideration of this one subject.

Table I

2380 COLONS EXAMINED APRIL 1. 1932, TO JULY 1, 1934

71.5%	Normal Colons
14.6%	Miscellaneous Diagnoses
0.1%	Anomalies
0.5%	Tuberculous Enterocolitis
2.1%	Ulcerative Colitis
2.2%	Postoperative Colons
3.6%	Diverticulosis
5.3%	*Colonic Neoplasm*

In searching a colon for the telltale indications of intrinsic neoplasm the roentgenologist must, if he hopes for a high degree of accuracy, employ every technical aid at his disposal and energetically combat adverse working conditions. He must be fully aware of the basic diagnostic criteria of neoplasm and their relative reliability and school himself in the appearance of other colonic lesions and various artefacts apt to simulate neoplasm. Before all else he must know the indications for a study of this sort which may be truthfully if somewhat facetiously summarized as "an expression of willingness on the part of any patient to submit to examination" for skill goes hand in hand with experience and experience shows that one colonic cancer in every ten detected by x-ray can successfully escape detection or even suspicion by all other diagnostic means.

More specifically, x-ray colon studies should be done with greater frequency than is now common in routine physical examinations. All cases complaining of bowel distress of any sort or reporting change in bowel habits deserve to have the threat of cancer eliminated in this simple way. The patient alarmed by the appearance of blood in the stools should not be treated in any manner until cancer has been excluded as a possibility. Unexplained weight loss or anemia may find its answer in the colon and palpable abdominal masses even though extra-colonic can be more readily identified by observing the pattern of the barium-filled large bowel. Conservative tactics in ruling upon the advisability of employing x-ray methods are surely out of place when dealing with suspected colonic dysfunction.

METHODS

Methods of examination are so very important in adequately studying the colon that they warrant mention before proceeding further in this discussion. Unfortunately perhaps, the indiscriminate feeding of barium suspension by mouth followed by interval filming during the subsequent 24 to 48 hours, though costly in materials and time, can by no means be considered trustworthy. To be sure it is often advantageous if not imperative to observe the behavior within the colon of barium so fed and such film studies may present findings to warrant colon examination but the opaque enema is the most logical first step and frequently the only one required. To be assured of reliable later observations the patient should be carefully prepared in advance to insure thorough cleansing of the colon. The most reliable procedure is the administration of a large dose of castor oil (two ounces) the evening of the day preceding followed by a generous cleansing enema on the morning of the day set for the examination. Breakfast should be omitted though lunch may be permitted if the patient is examined in the early afternoon. Concessions allowed in the rigor of this preparation almost invariably produce later difficulties.

Following these preparations a two-quart enema can filled with barium suspension at body temperature is hung about four feet above the fluoroscopic table. The connecting tubing is carefully divested of its residual air and clamped; the smooth, olive-tipped metal nozzle is introduced beyond the anal sphincters. With the patient recumbent, the room thoroughly darkened and the examiner's eyes thoroughly accommodated to dim light, the examination may begin. The chest and entire abdomen are quickly surveyed before injection is begun and then barium is slowly introduced into the rectal ampulla. The pelvic portions of the bowel cannot be satisfactorily palpated through the abdominal wall and it is necessary to rotate the patient's body from side to side as filling progresses in order to closely observe the entire course of the rectum and the sigmoid. Care must be exercised to prevent too rapid filling at this stage for if abnormalities are seen, one's best chance to make permanent film records may be lost due to annoying overlapping shadows. Small films may be exposed with accurate screen positioning, adjusting the lead shutters of the fluoroscope to frame the particular portion of the gut desired. Films so exposed are of tremendous value in demonstrating lesions of the pelvic colon, undoubtedly the most difficult portion of the large bowel to examine. Barium is now allowed to fill the various segments of the colon, the advancing shadow being observed through a small shutter aperture to enhance detail. The routine employment of a fluoroscopic grid is a further aid to improved visibility. As the colon fills its walls may be tested for pliability by manual palpation, the examiner's fingers remaining just outside the field of vision. Rotation of the patient should be employed to permit the visualization of all portions of the flexures and unusual redundant loops of gut. Injection is continued until complete filling of the ascending colon and cecum has been accomplished which is best determined when partial filling of the terminal ileum permits localization of the ileo-cecal junction. The appendix, though often visible, cannot be depended upon to fill in all cases. As soon as barium is seen in the small bowel, injection is halted and the completely filled colon is reviewed throughout its course. Two films of the entire colon are made in expiration, using grid technic, with the patient prone, the first immediately after filling, the second after voluntary evacuation.

The specialized procedure of double contrast preparation, the injection of enough air to distend the lumen, may now be done by inserting per rectum a nozzle to which is connected a rubber syringe. Films are exposed in stereo. This refinement can be used to great advantage in recording lesions observed or suspected at the screen in segments which are apt to be obscured by other parts of the barium column and in conducting a study of the colonic mucosa for ulcerations and small lesions projecting into the gut lumen.

This recitation of technical details may seem superfluous but unless such details are routinely observed a goodly number of

colonic cancers perfectly capable of demonstration will be overlooked. In the detailed study of an even hundred cases diagnosed by x-ray as "carcinoma of the colon" the lesion was positively identified by routine films in 74, by frontal plane double contrast films in 49 of the 55 cases so examined, by oblique double contrast exposures in 17 of the 19 attempted and in all but two of the various local detail exposures used in fifty cases. The entire group were either recognized or strongly suspected in the fluoroscopic studies.

The lesions were distributed as follows: Pelvic colon (rectum and sigmoid) 60%, left colon (distal half of transverse colon and the descending colon) 18%, right colon (cecum, ascending colon and proximal transverse colon) 22% (Fig. I). It is noteworthy that 60% of these lesions were found in the pelvic cavity. Those in the rectum were all identified by palpation or direct vision through the proctoscope. Only 15 of the 31 sigmoid lesions could be so recognized. (Table II)

CARDINAL SIGNS

The cardinal roentgen signs of carcinoma as it occurs in the colon are few, easily recognizable for the most part and highly reliable. The proliferation of tumor cells produces a ragged defect in the normally smooth contour of the opaque barium column, the so-called "filling defect". Because the tumor mass customarily extends longitudinally for a short distance into the lumen of the normal gut above and below, it is possible for thin barium to creep into the sulcus so formed producing an overhanging ledge about the margins of the filling defect. It is uncommon for a primary carcinoma of the colon to involve long segments of gut and hence one should look with suspicion upon filling defects longer than four inches when tempted to report carcinoma. New growths are prone to quickly involve the entire circumference of the bowel and hence annularity of the filling defect is a common finding. If sufficiently well advanced, carcinoma will largely fill the lumen of the bowel and although a tortuous down-stream channel may have been maintained by the fecal

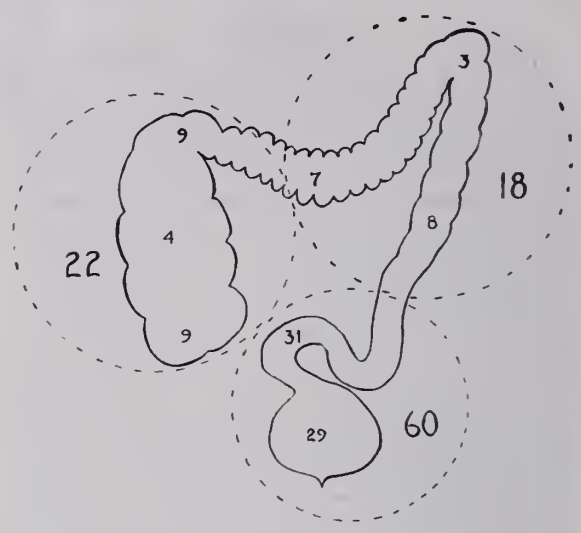

Fig. I

stream, attempts to reverse the flow may well be expected to force together valve-like masses of neoplastic tissue completely obstructing that canal. Partial or complete retrograde obstruction may therefore be encountered and deserves mention. Tumor infested bowel loses its normal pliability; carcinomatous tissue is firmer than hollow gut, and, in those portions of the colon accessible to the palpating hand, one expects to "feel" and "see" the signs of carcinoma simultaneously. Of the one hundred cases under discussion "filling defect" was observed in 96, "overhang" could be demonstrated in 91, the visible defect did not exceed four inches in length in 76, the defect was obviously annular in 75, there was partial or complete retrograde obstruction in 52 and in 28 a mass could be palpated at the site of

Table II

OBSERVATIONS IN 100 CASES DIAGNOSED COLONIC NEOPLASM BY X-RAY

Type of Film Study	Routine	Frontal D-Contrast	Oblique D-Contrast	Special Detail Expos.
Total Number	96	55	19	50
Lesion Shown	74	46	17	48
Clinical Impression				
Probable or Positive Diagnosis				66
Suspected Among Several Diagnoses				23
Not Suspected				11

Rectal and Sigmoid Lesions

29 Rectal Lesions—All Demonstrated by Digital, Proctoscopic, or Sigmoidoscopic Examination

31 Sigmoid Lesions — Only 15 Demonstrated by Digital, Proctoscopic, or Sigmoidoscopic Examination

lesion. (Fig. II) It must be added that the foregoing cardinal signs fail in the case of isolated polyps and the rare sarcomata of polypoid form which account for the four cases in which a typical irregular filling defect was not observed.

Many trying difficulties may beset the examiner most of which result in poor visibility and the majority of which can be overcome by diligence, patience, and resourcefulness. Excessive obesity of the patient reduces visibility and defeats palpatory effort and obesity may well be present. On the other hand the patient may be sick and weak, unable to cooperate effectively. Loss of sphincter control renders complete filling exceedingly difficult and patients who present this problem are the bane of the examiner's existence. After operative interference, when landmarks are distorted and in cases in which the colon is anomalously distributed about the abdomen, one's difficulties are greatly multiplied. Poorly arranged equipment, lack of reliable help, improper film processing, and inadequate darkening of fluoroscopic rooms should be avoidable; if not, these conditions can greatly impair efficiency.

The differential x-ray diagnosis of colonic carcinoma is usually relatively simple since the cardinal signs already mentioned are safe and readily recognizable. Inflammatory lesions and neoplastic invasion from other organs offer the greatest problems in arriving at an accurate diagnosis. Of the former the most common pitfall is the deformity produced by infection associated with diverticulosis. Fortunately this condition is almost wholly restricted to the neighborhood of the junction between the descending colon and the sigmoid and one learns to be wary of elongated, irregular, tapering filling defects in this locality whether he can demonstrate diverticula or not. Tuberculosis of the cecum and intussusception at the ileocecal junction are apt to trap the unwary and it is well to remember that tuberculosis as a rule involves the cecal tip, the ileocecal junction, and a varying length of ileum. The transient presence of a palpable tumor and a smoothly rounded luminal mass with annular rings of barium surrounding it should

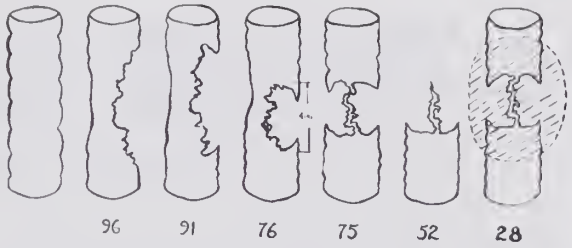

Fig. II

at once suggest intussusception. Localized zones of involvement in ulcerative colitis are rare but do occur. Double contrast studies are invaluable in correctly identifying this lesion and it is seldom that such lesions will show "overhang". Appendiceal abscess can be most confusing, and to effectively eliminate this possibility, one can use barium by mouth to good advantage in order to visualize the terminal ileum which by distribution and outline of lumen will sometimes show greater extent of mass than is common in carcinoma.

As for secondary neoplastic implants in the wall of the colon one need have no serious concern, for, though it is true that these may so closely resemble primary lesions as to be indistinguishable, they can scarcely be confused with any non-neoplastic condition and even in the hands of the pathologist they may prove difficult of differentiation from primary carcinomata.

SUMMARY

Among the diseases of the colon recognizable by the roentgenologist, carcinoma outranks all others in frequency. At least ten per cent of the cases are unrecognized and unsuspected clinically and are found only upon careful x-ray examination.

The roentgen diagnostic criteria of colonic carcinomata are accurate and reliable in high degree. Meticulous care in the details of the examining technique is requisite for the achievement of consistent accuracy of diagnosis.

The roentgen examination of the colon is of unquestioned value in the recognition of organic disease of this organ. It is the most powerful diagnostic weapon that medicine has at the present for the diagnosis of colonic malignancy.

Clinical Conditions Associated with Congenital Anomalies of the Small Intestine*

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THE subject on which I have been asked to speak, congenital anomalies of the gastrointestinal tract, is so large that I feel that an adequate presentation would be impossible in the time allotted to me. For that reason I have chosen to confine this paper to a consideration of the clinical conditions associated with congenital anomalies of the small bowel.

A classification of the congenital anomalies of the small intestine comprises the following:

1. Abnormalities in the rotation of the gut.
   a. Situs transversus.
   b. Congenital volvulus.
   c. Incomplete rotation.
2. Changes in the lumen.
   a. Stenosis.
   b. Atresia.
   c. Aplasia.
3. Abnormalities of the vitelline duct.
   a. Exomphalos and congenital umbilical hernia.
   b. Meckel's diverticulum.
   c. Umbilical sinus, fistula, cyst or tumor.

Errors in rotation of the gut in embryonic life cause the bowel to become fixed in abnormal positions in the abdomen. They explain left side appendicitis and the appendix that is occasionally found up near the gallbladder. Faulty rotation is often associated with a narrow or abnormal mesenteric attachment to the posterior wall that tends to congenital volvulus formation and strange fixations of the bowel that cause obstruction.

In the second group there is a failure of normal development of the lumen in some part of the bowel. The resulting lesion may be:

1. Stenosis, in which there is a partial obstruction of the lumen due to narrowing, or to a perforated septum;

2. Atresia, in which there is a complete obstruction with a continuity of the bowel and its mesentery. The occlusion may be due to a complete septum, or to an absence of the lumen in one or more segments of the bowel;

3. Aplasia, in which there is a complete obstruction due to the entire absence of a segment of the bowel and its mesentery.

In rare instances these abnormalities may be caused by tumors, peritoneal bands or pressure from a mesenteric pedicle, but in most cases they are due to a failure of normal vacuolization and canalization of the epithelial proliferation that fills the lumen of the bowel until the second month of foetal life. The site of the occlusion is in the duodenum, at or near the papilla of Vater in about one-third of the cases, and less frequently it is located at the duodenojejunal angle, the site of the vitelline duct or elsewhere in the ileum or jejunum.

The bowel immediately above the site of obstruction shows a marked distention which gradually lessens higher up. In the early stages this dilatation is associated with edema and hypertrophy of the wall. A little later on hemorrhage occurs into the wall with ulceration of the mucous membrane which may lead to gangrene, and perforation in the final stages. The bowel below the point of obstruction is usually quite shrunken and appears as a group of small loops resting under the distended coils of the upper segment. Frequently the wall is hard and fibrous with a lumen that may be only five to ten millimeters in diameter.

The clinical picture of intestinal obstruction in the new-born produced by stenosis, atresia, aplasia and congenital volvulus is so definite that there is usually no difficulty in making a diagnosis. Progressive vomiting, marked constipation, rapid loss of weight and dehydration, with increasing abdominal

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distention and visible peristalsis unless the obstruction is too high up, are usually evident. Conditions such as pyloric stenosis, rectal obstruction, imperforate anus and strangulated hernia are readily ruled out. Other causes of obstruction such as intussusception and internal herniation are usually not discovered until the abdomen is opened.

Some idea of the level of the obstruction may be derived from a flat x-ray plate of the abdomen taken in the upright position as suggested by Webb and Wangensteen. Collections of gas and fluid levels will be present in the loops of small bowel above the obstruction. Barium should never be given by mouth to these patients, as it is unnecessary and its presence in the bowel will interfere with any operative procedure.

Cases of atresia or aplasia of the bowel are invariably fatal if surgical treatment is not employed. The patients lose weight and strength rapidly and death occurs within five or six days. Where the obstruction is due to stenosis the patient may live for a period of time, depending on the degree of narrowing in the bowel. Some patients have lived for months or even years, if restricted to a diet of soft and finely divided food.

TREATMENT

Aside from mild cases that may be treated by dietary means, surgery offers the only hope of relief in congenital obstruction of the small bowel. The indication for an operation is clear just as soon as the diagnosis has been made, and it should only be delayed long enough to properly prepare the patient. This can be done satisfactorily by giving salt solution with 3% glucose by hyperdermoclysis and washing out the stomach immediately before operation.

Under ether anesthesia assisted by local novocaine infiltration a liberal paramedian incision should be made. In the cases where the obstruction is due to faulty rotation, the entire small bowel should be delivered in order to see what corrective operation is necessary. A volvulus should be untwisted or any bowel which is fixed in an abnormal position should be freed. In addition, Ladd has shown that the obstruction tends to recur unless any attachment of the colon or ileum to the right of the duodenum is freed so that the duodenum is entirely in view. This can be done by incising the right parietal peritoneum and moving the cecum and ileum to the left side of the duodenum.

In the cases where the obstruction is due to stenosis or atresia some type of anastomosis is necessary to restore the continuity of the bowel. For obstruction in the duodenum a duodenojejunostomy is usually better than a gastroenterostomy. For obstructions lower down an enteroenterostomy or in some places on ileocolostomy should be done.

The technique of the operation in these small infants is difficult because of the shrunken distal segment of the bowel and its tiny lumen. An anastomosis can be made much more easily by dilating this part with water or air injected into the lumen through a hypodermic needle or a catheter. Only one row of silk suture with the Connell stitch is necessary for a tight union. It is surprising how quickly the distal bowel enlarges after fluids are given by mouth and by rectum.

The results that have been obtained in the treatment of congenital obstruction of the small bowel are not very encouraging. The mortality is extremely high, and in view of the anatomical conditions that are usually encountered, it will probably always remain at a very high level. However, these cases should not be considered as absolutely hopeless.

A better familiarity with these conditions should lead to an early recognition so that these infants may be brought to surgery while they are still fairly strong and before the bowel has undergone degenerative changes. With sufficient preoperative preparation they will be better surgical risks, and careful surgical technique and good judgment may save a few of these unfortunate infants.

I now wish to consider the third group of anomalies which are derived from remnants of the omphalomesenteric or vitelline duct. As an embryonic structure extending from the small bowel to the umbilicus, it normally disappears from the fourth to the seventh week of foetal life, but some remnant is present in 2% to 4% of individuals.

Table 1

MALFORMATIONS OF THE OMPHALO-MESENTERIC DUCT

A. Incomplete involution.
   1. Persistence of the connection between the intestine and the umbilicus.
      Open diverticulum.
      Diverticulum attached to the umbilicus.
      Persistence of the omphalomesenteric vessels only.
      Fibrous cord alone or suspending an enterocystoma.
   2. Persistence of the intestinal part of the omphalomesenteric duct.
      Meckel's diverticulum, either free or secondarily fixed.
      Enterocystoma in bowel wall.
   3. Persistence of the umbilical part.
      Enterocystomata.
      Cysts of the umbilicus.
      Residual tumors.
      Mucous sinus.

B. Excessive evolution.
      Narrowing or stenosis.

As the result of faulty evolution, the duct may persist as a mucous-lined tube extending from the ileum to the navel, forming a fecal fistula. Again, the duct may persist as a fibrous band attached to the ileum and dangling free in the peritoneal cavity, or extending from the ileum to the umbilicus, and may be the cause of an intestinal obstruction. More often the duct may remain patent in part. If this occurs at the outer end, a mucous-lined sinus open and discharging at the umbilicus will result. It may be associated with a small bleeding tumor from misplaced islands of gastric or pancreatic tissue.

In rare instances only the central portion of the vitelline duct may remain open, in which case a mucous cyst suspended by a fibrous cord from the umbilicus or ileum, or from both, will result. Much more frequently only the inner end of the duct at the ileum persists. This is most familiar as a diverticulum described by Meckel, consisting of a blind tube of small bowel opening into the antimesenteric border of the ileum, at some point varying from one to three feet from the ileocecal junction. It is distinguished from a false diverticulum by consisting of all coats of the bowel and often contains islands of pancreatic or gastric tissue. From the tip of the diverticulum a cord of fibrous tissue may float freely in the abdominal cavity, or be attached to the navel or some neighboring vicus. Very rarely instead of the usual Meckel's diverticulum an epithelial-lined cyst, known as an enterocystoma, containing dried mucus, will be present in the wall of the ileum. This structure was found in a child in whom the enterocystoma had produced an intussusception. Instead of a diverticulum or a cyst, only a narrowing or constriction in the wall of the ileum may mark the site of the vitelline duct.

Although Meckel's diverticulum is often found incidently at operation or autopsy, attention is usually drawn to it by some pathological change. For some unknown reason males are affected two to four times as often as females. Practically all of the cases reported have occurred in children ranging in age from infancy to adolescence, but occasional cases have been seen in adults.

Table 2

COMPLICATIONS OF MECKEL'S DIVERTICULUM

1. Inherent in malformation	Umbilical polyp Umbilical sinus Fecal fistula Enterocystoma Exomphalos	
2. Mechanical	Intestinal obstruction	Fecal stasis in diverticulum Bands and knots Volvulus of adjacent bowel Kinks of adherent bowel Intussusception arising from invagination
	Volvulus of diverticulum Invagination (without intussusception) Diverticulum in hernial sac (Littre)	
3. Inflammatory	Acute diverticulitis Chronic diverticulitis	Uncomplicated With perforation and peritonitis or abscess
	Tuberculosis	
4. Peptogenic	Acute ulceration Chronic ulceration	With or without hemorrhage or perforation
5. Tumor site	Benign Sarcoma Carcinoma Mixed tumors	
6. Traumatic	Rupture Foreign body perforation	
7. Unusual types (Possibly of doubtful origin)	Duplex Mesenteric cysts	

The clinical pictures resulting from the principal pathological changes associated with Meckel's diverticulum may be described as those due to peptogenic ulcer, with or without perforation, diverticulitis, intestinal obstruction and tumor formation.

1. PEPTOGENIC ULCER

This is the most interesting and frequent pathological condition in Meckel's diverticulum. The finding of patches of gastric mucosa on the mucous lining of many of the diverticula has probably a significant relation to ulcer formation. This aberrant mucosa is usually located near the tip of the diverticulum and the ulcer occurs not in the patch of gastric mucosa, but on the edge of it in the intestinal mucosa or in the nearby ileum at the neck of the diverticulum. It seems probable that the ulcer formation is associated with the acid secretion of this gastric mucosa. However, as pointed out recently by Hudson and Koplik, the ulcers in no way resemble the usual chronic peptic type, but instead they are of the acute type with sharply demarcated margins and a different appearance grossly and microscopically.

The tendency of these ulcers to bleed and perforate produces the signs and symptoms that point to their presence. Hudson and Koplik emphasize the importance of intestinal bleeding in all pathological conditions associated with Meckel's diverticulum. It is especially marked in the ulcer cases where it is usually present and may be the only clinical sign. The blood is usually changed and mixed with the stools, so that they may even be tarry, but if profuse, the stools may be bright red, or salmon color. Bleeding may occur in varying amounts and at periods extending over weeks or months with intervals of freedom. It may come on in an amount sufficient to cause death, or in small amounts continued over a long period producing a picture of secondary anaemia. Pain without perforation, especially in young children, is a very unreliable symptom. When present in older children it is often referred to the navel and described indefinitely as colicky or gnawing. Tenderness and rigidity are noticeably absent as well as any palpable mass.

Perforation, however, brings on immediate abdominal pain with nausea, vomiting, and diffuse tenderness and rigidity. Infants, however, may evidence little rigidity. Distention occurs but if the diverticulum is situated somewhat high on the ileum it will not be marked while vomiting will be profuse. Obstipation will be present and may suggest an intussusception. Greenwald and Steiner have pointed out that perforation in these ulcer cases is far more serious than in gastric ulcers, as the contents of the ileum are more infectious, and the walling off power of children is often ineffective. Fulminating peritonitis leading to death usually follows.

2. DIVERTICULITIS

Inflammation in the diverticula may be primary or secondary, as designated by Griffith. In the primary type the pathological changes are entirely similar to those occurring in appendicitis. The secondary type results from constriction or strangulation when the diverticulum becomes twisted, or when it is caught in a hernial sac. In both types perforation, abscess formation, or diffuse peritonitis may follow.

The clinical picture of diverticulitis, except for the cases which result from strangulated hernia, resembles appendicitis so closely that a differentiation is usually impossible. However, Wolfson and Clurman think the point of tenderness is usually about one-half inch below the umbilicus, and slightly to the right or left instead of further out in the right iliac fossa, and that the vomiting is more persistent and the pain is more colicky and severe. Occasionally the presence of blood in the stool will add a very suggestive sign to the usual symptom complex. When perforation occurs it is due to gangrene and the evidences of diffuse peritonitis or abscess formation come on gradually. This is usually quite different from the perforation that occurs in cases of ulcer where the onset of peritonitis is generally abrupt and severe.

3. INTESTINAL OBSTRUCTION

Mechanical blockage of the bowel is frequently due to Meckel's diverticulum. Kuttner states that it is responsible for 5% to

7% of all internal incarcerations. The obstruction may be brought about in several ways. Usually the diverticulum, or the fibrous cord connected to it, becomes attached to some other structure in the abdomen forming a ring into which a loop of bowel becomes knotted or strangulated. In other instances, the diverticulum may become inflamed and adhere to an adjacent part of the ileum producing an obstructive kink. This occurred in one of our patients in whom it was found that a gangrenous diverticulum adherent in the wall of an abscess cavity at the root of the mesentery had kinked the ileum. In other cases a volvulus may form, as occurred in another of our patients by a loop of bowel becoming twisted about the fibrous band extending from the diverticulum to the umbilicus. Another way in which obstruction is brought about is by incarceration and strangulation of the diverticulum in a hernial sac of the Littre type. Finally, it is not uncommon to find that the frequent type of obstruction in infants, namely intussusception, is caused either by a Meckel's diverticulum that has become inverted into the bowel, or an enterocystoma, as happened in one patient whom I saw in consultation. By peristaltic action the ileum is infolded and an intussusception is formed.

The symptom complex in all of these forms is that of a mechanical ileus. In many of the cases blood may be present in the stools, especially in the intussusception group.

4. TUMOR FORMATION

This is a very rare condition in Meckel's diverticulum. Myoma, sarcoma, carcinoid and carcinomatous tumors have been found in adult patients. Possibly the presence of aberrant gastric and pancreatic tissue may predispose to tumor formation. The clinical picture in these cases is that of partial obstruction of the bowel with constipation, abdominal pain, and perhaps a palpable mass.

When we consider the diagnosis of pathological lesions associated with Meckel's diverticulum we are impressed with the importance of blood in the stools as an indicative sign. It may be stated emphatically that the presence of this sign should suggest at once that possibility of Meckel's diverticulum as the seat of trouble. When accompanied by vague abdominal pain an ulcer is a definite possibility. It can be differentiated from bleeding gastric or duodenal ulcer by the positive fluoroscopic findings which are entirely absent in ulceration in Meckel's diverticulum. Other causes of blood in the stools such as polyps, adenomas and ulcerative colitis can usually be ruled out by proctoscopic examination. Cases of Henoch's purpura usually show subcutaneous hemorrhages in addition to intestinal bleeding.

When perforation occurs in the ulcer the picture of a rapidly spreading peritonitis is suddenly added to the intestinal bleeding. The rigidity, however, is apt to be doughy rather than boardlike because of the comparatively weak abdominal muscles in children. A fluoroscopic examination may be of help by showing free gas in the abdominal cavity and thus indicating a perforation. The condition is usually mistaken for an intussusception, but the sausage-like tumor is absent as well as the blood stained, currant jelly mucus. Other forms of intestinal obstruction and appendicitis can be ruled out by the absence of blood in the stool.

The diverticulitis cases simulate appendicitis so closely that they will probably continue to be mistaken for appendiceal lesions unless there is a history of blood in the stools. Greenwald and Steiner, think that the point of tenderness is usually very near to the umbilicus, and by that sign they successfully diagnosed two cases of diverticulitis. As both conditions demand immediate operative treatment the exact diagnosis is only of academic importance. However, the surgeon who fails to find the pathology he expected in the appendix should not forget to look carefully for a Meckel's diverticulum. By doing so he may solve his diagnostic problem and save the patient.

In the cases of intestinal obstruction the association of Meckel's diverticulum can only be suspected when blood is present in the stool, or there is a history of intestinal bleeding. Otherwise the lesion cannot be diagnosed until the abdomen is opened. It

should be noted that the obstruction may be due to an intussusception caused by a Meckel's diverticulum, or by the adhesions of a diverticulitis.

In considering the prognosis, attention should be called to the seriousness of these lesions of Meckel's diverticulum and to the necessity of making an early diagnosis, if possible. The ulcer cases treated surgically before perforation occur, usually progress favorably even in very young subjects. However, if perforation occurs with the rapidly spreading peritonitis that follows in these patients, the mortality will be about 50%.

The diverticulitis cases will show about the same surgical results as a similar group of appendicitis cases in respect to the extent of the pathological process at the time of operation. The importance of early operation is self-evident.

The outlook in the cases of intestinal obstruction depends on the amount of damage to the bowel. This can only be effected by early diagnosis and treatment. Unless the obstruction can be relieved without resorting to resection of the bowel, the outlook is very poor.

The treatment of all pathological conditions arising from Meckel's diverticulum is surgical. Medical treatment has been tried in the ulcer cases on the assumption that they are similar to gastric and duodenal ulcers. This idea is incorrect because ulcers of Meckel's diverticulum tend to be acute rather than chronic and to perforate suddenly before protective adhesions have formed. In addition, the contents of the ileum are very much more infectious than those of the stomach or duodenum and produce peritonitis more rapidly.

In the cases of ulcer and diverticulitis the surgical treatment consists of amputation of the diverticulum with closure of the ileum at the neck of the pouch. Resection of the bowel should not be done as it is rarely necessary and is very apt to be fatal in children. It should be remembered that the lumen of the ileum may be so narrowed in doing a safe closure of the stump, that a lateral anastomosis should be made between a loop of ileum just above and one below the site of the diverticulum. I know of two cases in which failure to observe this precaution necessitated reopening of the abdomen because of intestinal obstruction.

In the cases of mechanical ileus caused by Meckel's diverticulum the operative procedure should embrace the steps necessary to free and repair the incarcerated bowel, and to remove the diverticulum. In all intussusception cases, the ileum should be examined carefully for the possible presence of a diverticulum. It may be inverted into the bowel and easily overlooked, but failure to discover and remove it will probably result in a perforation. Finally, because of the great tendency of Meckel's diverticulum to produce pathological conditions, it would seem to be wise to remove it, if feasible, for prophylactic reasons whenever it is found incidentally in doing a laparotomy.

Management of Cataract in the Insane

By V. A. CHAPMAN, M. D.

Consulting Ophthalmologist, Milwaukee County Hospital, Wauwatosa
Associate Professor in Ophthalmology, Marquette University Medical School, Milwaukee

INSANE individuals, with blindness caused by cataracts, can be successfully operated upon for restoration of vision. Surprising results may follow.

One case of blindness caused by cataract of each eye, in a woman of 70 years of age, recovered from depression insanity after successful removal of cataract. Her mental symptoms disappeared and she was discharged from the asylum and returned to her family.

The cataract in this instance was extracted under local anaesthesia, with attendants beside the operating table to prevent sudden movement of the patient. They were not needed. The patient remained calm and quiet under the reassuring voice of the surgeon.

A case with maniacal insanity was of necessity conducted in a much different manner. This woman, well up in years but lithe and active, had an old blind atrophied globe which was repeatedly actively injected and painful. Symptoms of sympathetic irritation appeared in the fellow eye which was blind because of senile cataract.

This patient, in spite of her strenuous efforts to avoid it, was put under general anaesthesia.

The artophied blind eye was enucleated; and the cataract was removed from the other eye under the single induction of general anaesthesia.

The patient returned to her violent mania when the general anaesthesia had passed, and tore the bandages from her eyes.

Nevertheless, the ophthalmological results of the operations were all that could be desired.

Operation for restoring sight to the insane blind should not be considered as wholly out of the question. Restored vision in such a patient is not only a boon to the patient, but economically greatly lessens the expense of the care needed for such an individual. It may indeed be a factor for recovery from mental aberration.

Urological Surgery in Children*

By HERMAN L. KRETSCHMER, M. D.
Chicago

AS ONE reviews the field of pediatric urology and takes stock of the accomplishments in this department of medicine one is greatly impressed by three outstanding facts.

1. The almost complete disappearance of exploratory operations upon the urinary organs in infants and children.

2. The decreasing number of cases of persistent pyuria seen by the urologist that have been treated for months or years without a cure having been effected.

3. The increasing number of children who each year are subjected to a complete urological examination.

1. It is just as uncommon and as infrequent to see exploratory operations in children at present, as it is to see exploratory operations in the adult. True, there is the very rare and exceptional case of the adult in whom it is impossible to make an accurate diagnosis before operation, and this condition may also occur in children. However, with modern urologic methods, exploratory operations have practically disappeared. It certainly is true that the patient in whom the preoperative diagnosis allows the surgeon to plan his operation beforehand is better off than the patient in whom the operation must be planned after it is in progress. The disappearance of exploratory operations in children is evidence of great progress in our understanding of their surgical problems.

2. A second definite step of progress in pediatric urology is the rapid disappearance of the patient who has been given prolonged medical treatment without relief.

The necessity for urologic study in children suffering from pyuria that persists after medical treatment has been carried out for a reasonable length of time has been emphasized many times. Formerly, it was not uncommon to see many children who had been under treatment for many months, or even years, and in whom pyuria persisted. The dangers incident to a prolonged pyuria, not to mention the dire results, need not be emphasized, since many lesions, if recognized early, can, with the proper treatment, be cured. It is of vast importance to the health of the child that the underlying cause of the pyuria be recognized and removed, otherwise the kidney or kidneys may suffer irreparable damage which may finally lead to the death of the patient.

The statement, therefore, seems justified that infants and children suffering from disease of the urinary organs should be given the benefit of a complete urological examina-

* Read at the Annual Meeting of the State Medical Society of Wisconsin, Green Bay, September 12, 1934.

tion in cases where proper medical treatment efficiently carried out for a reasonable length of time fails to effect a cure.

3. It is exceedingly gratifying to note the changed attitude on the part of both the general practitioner and pediatrician on this subject. These men have developed so decided a urological point of view in their urinary cases that they request a careful urologic study and investigation when doubtful problems present themselves. This attitude results in better and more efficient service to infants and children.

It is exceedingly interesting to note the change in the type of lesions found in children today and also to note the corresponding change in the literature. Twenty-five years ago the literature on urology in children dealt for the major part with the subject of pyelitis or cystopyelitis. Surgical papers were rare and dealt almost entirely with the treatment of ectopia of the bladder.

With the development of small cystoscopes and the resulting intensive study, the type of article began to change and one read the statement, not at all infrequently, that children suffered from practically the same lesions of the urinary organs as adults, with the exception of carcinoma and benign hypertrophy of the prostate. I myself have made this statement. Since this statement was made, I have seen many children suffering from various lesions of the urinary organs, and it is my impression that at the present time there are more cases of obstruction to the outflow of urine, as well as more cases of congenital anomalies, than formerly. These various lesions will be considered, in more or less detail, further on in this paper.

MALIGNANT TUMORS

As a general statement one may say that malignant disease in infancy and childhood is a rare occurrence, although when it does occur it is of the greatest frequency in the kidney. On the other hand, cases of malignant disease of the bladder are exceedingly uncommon.

The malignant tumor in infancy and childhood is the so-called mixed tumor of Wilms, the adenomyosarcoma.

These tumors generally have reached an enormous size by the time the patient is presented for examination, for the reason that children are unable to give expression to symptoms, and hematuria, so common a symtom of tumor of the kidney in the adult, is rare. Due to the enormous size of the tumor, operation is often difficult, frequently accompanied by shock, and followed by a relatively high mortality.

Fortunately this type of tumor is radiosensitive, and we now make it a rule to give all of these patients a course of preliminary x-ray treatment before operation. This results in a rapid and marked diminution in the size of the tumor, which incidentally makes the nephrectomy much easier.

Preoperative and postoperative management is most important in these cases. Blood transfusions are an exceedingly valuable aid either before or after the nephrectomy, but since we have used preoperative radiation, the need for this postoperative measure has been greatly lessened.

As an example of the marked reduction in the size of these tumors following preliminary radiation, I would like to present the following case.

Case 1. R. L., male, aged eight months, referred by Dr. Parmelee, admitted to the Presbyterian Hospital, August 2, 1934.

The infant has always been well. One month ago the mother noticed the presence of a swelling in the right upper quadrant. The mother volunteered the statement that the child's abdomen has always been more or less distended since birth, and to relieve the distention she had frequently given the baby an enema. There have been no urinary symptoms, nor are there any now. No gastrointestinal symptoms.

PHYSICAL EXAMINATION—A well-nourished, white, male, saddle-nosed child, not acutely ill. Mouth, neck, heart and lungs, negative. On examination, a very large firm mass in the right upper quadrant of the abdomen, which disappears under the costal arch, and extends nearly a handsbreadth to the left of the umbilicus. The lower border of the tumor reaches into the pelvis.

URINALYSIS—Repeated examinations of the urine are negative for sugar, albumin, blood, pus and casts.

BLOOD EXAMINATION—Red cells 5,780,000; leucocytes 8,550; hemoglobin 60%.

ROENTGEN-RAY EXAMINATION, August 6, 1934—Kidney outlines are obscured by a large soft

Fig. 1, Case 1. Intravenous Pyelogram. Note large outline of the tumor, with lateral displacement of the intestines.

Fig. 2, Case 1. Note reduction in size of tumor after preoperative radiation with roentgen-ray. Right pyelogram shows slight dilatation. Left pyelogram normal.

tissue shadow that almost fills the entire abdomen. Pyelogram on the right side shows the pelvis displaced upward and dilated. The ureter deviates upwards and lies over the shadow of the spine. (Fig. 1). The pyelogram on the left side shows the kidney pelvis opposite the third lumbar vertebra.

A diagnosis of Wilms' tumor was made and the patient was given x-ray treatments; after which a rapid diminution in the size of the tumor occurred.

SECOND ROENTGEN-RAY EXAMINATION, September 18, 1934. (Fig. 2). The outline of the tumor is very much smaller than on the previous film. The intravenous pyelograms show much more clearly than the first films.

OPERATION, (ether anesthesia) September 21, 1934.—A right nephrectomy was done.

PATHOLOGY.—The kidney is seven inches long and four inches wide. Attached to the lower pole of the kidney is a tumor mass which is globular in outline and the size of a large orange. The surface is smooth and grayish-white in color. There is a sharp line of demarcation between the tumor and the kidney substance. There are two pelves and two ureters present. There is a definite compression of the lower kidney pelvis by the tumor mass.

RESULT.—Uneventful recovery. Patient discharged, October 5, 1934, with instructions to return for further x-ray treatment.

STONES IN URINARY ORGANS

Here again, as in malignant disease, stones in the urinary tract are relatively uncommon. Although in certain parts of the world (India and China), stones in the bladder in children are common, for all practical purposes we may say that in this country stones in children are uncommon. As in the adult, stone may be found in the kidney, ureter, or bladder, although stone in the ureter occurs less frequently than stone in the kidney and bladder.

The diagnosis should not be very difficult. It may not be easy to elicit a typical history of renal colic, yet careful examination of several specimens of urine passed each day, especially of specimens passed after an attack of abdominal pain, will often show the presence of abnormal elements in the urine that point towards the presence of a lesion in the urinary organs. Red blood cells, pus cells, and crystals are often of great diagnostic importance; and when these elements are associated with attacks of abdominal pain, a roentgen-ray examination of the entire urinary tract should be instituted.

In one of our cases, not only was stone in the kidney diagnosed by the finding of crystals and fresh red blood cells in the urine, but the kind of stone was diagnosed by the crystals.

As an illustration of the occurrence of stones in both the ureter and the kidney in a child, I should like to present the following case.

Case 2. B. W., male, aged ten years, admitted to the Presbyterian Hospital, June 18, 1934.

COMPLAINT.—For about three years the patient has had attacks of acute pain around the umbilicus immediately after eating. These attacks lasted a day or two and subsided for short periods of time. Rigid diets have given no relief. One year ago an appendectomy was performed from which the patient received no benefit. The pain is associated with nausea and vomiting and a fever of 100°, but no chills.

PAIN OVER THE RIGHT KIDNEY.—About six weeks ago he began having some dull pains over the right kidney. These pains were not severe enough to require sedatives.

HEMATURIA. On two different occasions gross blood was present in the urine.

FREQUENCY.—For the past six weeks there has been considerable frequency of urination without much relief after voiding. No nocturia.

HEADACHES.—Frequent, rather generalized, for the past year.

PHYSICAL EXAMINATION—Head, neck, chest, abdomen and external genitalia, normal.

ROENTGEN-RAY EXAMINATION.—A large stone in the pelvis of the left kidney and multiple stones in the calices.

PYELOGRAM.—Right pyelogram: a stone in the ureter with a hydroureter and hydronephrosis. Left pyelogram: a large stone in pelvis of the kidney with a large hydronephrotic cavity in the upper pole of the kidney and multiple stones in the calices. (Fig. 3).

CYSTOSCOPIC EXAMINATION.—Bladder, normal. Examination of the urine obtained at this time showed the presence of staphylococcus albus.

THALEIN TEST.—Time of appearance 10 minutes. Total output 57.4% in 1½ hours.

BLOOD EXAMINATION.—Red cells 5,280,000; leucocytes 12,000; hemoglobin 90%.

BLOOD CHEMISTRY.—Creatinin 1.6; non-protein nitrogen 39.4.

OPERATION, (ethylene anesthesia) June 22, 1934.—A very large stone was removed from the right ureter. The ureter was markedly dilated and covered with large tortuous blood vessels.

POSTOPERATIVE COURSE.—Patient developed an acute pyelonephritis of the left kidney from which he made an uneventful recovery and was discharged from the hospital, July 15, 1934.

SECOND OPERATION, (ethylene and ether anesthesia) August 7, 1934.—Resection of the large cavity in the upper pole of the left kidney with removal of stones. The large stone in the pelvis was removed through a pyelotomy incision.

EXAMINATION OF STONES.—Almost entirely calcium oxalate. A small amount of phosphate.

RESULT. — Uneventful recovery. Discharged from the hospital, September 6, 1934.

Fig. 3, Case 2. X-rays, showing a large stone in the pelvis of the left kidney and multiple stones in the calyces.

TUBERCULOSIS

Tuberculosis of the genito-urinary tract in infancy and childhood may be divided into two groups of cases.

A. Acute miliary tuberculosis of the kidney which is generally a part of an acute generalized miliary tuberculosis, and, as such, runs a rapidly fatal course and does not interest the urologist. This lesion, therefore, is a strictly medical and not an urological problem.

B. Chronic surgical tuberculosis. This lesion is rare and the rarity can be explained in several ways. First, it is well known that many children in infancy and childhood die of miliary tuberculosis, the body having had little time in which to build up a resistance to tuberculosis. And, in the second place, with the general decrease in the incidence of tuberculosis, it is only natural that there should be a diminution in renal tuberculosis and likewise a diminution of renal tuberculosis in infancy and childhood.

And here too, perhaps, an occasional case may be overlooked due to failure to search for tuberculosis in cases of chronic pyuria. But, there should be no difficulties in the rec-

ognition of renal tuberculosis. The history, the physical examination, the cystoscopic picture, the pyelogram and the demonstration of tubercle bacilli in the catheterized specimen from the kidney make the diagnosis easy and sure. The treatment, of course, here, as in the adult, is nephrectomy.

OBSTRUCTING UROPATHIES

One of the largest groups of cases in children that the urologist is called upon to treat are obstructing lesions. In a large number of instances, an infection is superimposed upon the obstruction. Probably most, if not all, of these obstructions are congenital in origin.

These congenital malformations soon lead to obstruction and this in turn to stasis. Sooner or later infection is added and pyuria occurs. The significance of the relation of stasis to the great tendency toward infection in this group of cases was known to the ancients.

Failure to consider the role played by mechanical obstruction in every case of persistent pyuria is apt to result in needless treatment, with ultimate destruction of the kidneys and finally the death of the patient, whereas the institution of proper surgical treatment will relieve the obstruction and save important organs.

These facts should be borne in mind in treating every case of pyuria in children.

Formerly, every child who suffered an acute attack of chills and fever and who had pus in the urine was diagnosed as a case of acute pyelitis. The sequence of events in these children's cases makes an interesting clinical story.

It is generally assumed that acute pyelitis is a self-limited disease. No doubt there are many cases of acute pyelitis that are never recognized and that make a spontaneous recovery.

In another group of cases, the pyelitis is recognized and subjected to the well established forms of treatment with which you are familiar, namely, rest in bed, the administration of alkalies, such as citrate of potassium or soda, and plenty of fluids. This is generally followed by the use of acid sodium phosphate and urotropin. The largest number of these patients are soon free of fever, and the pus and bacteria rapidly disappear from the urine.

The patients belonging to the third group are the ones that I wish particularly to talk about this afternoon. Within a short time the fever disappears and the urinary symptoms, if present, are abated. But pus and bacteria in the urine persist and a diagnosis of chronic pyelitis or pyuria is made. The treatment in this group of cases generally consists either of alkalies, urinary antiseptics, or vaccines, but the results are far from gratifying. This is the group of cases to which I referred earlier in this paper when I said "a second definite step of progress in pediatric urology is the rapid disappearance of the patient who has been given prolonged medical treatment without relief."

It remained for modern urologic investigation in this group of cases to change completely our notions of the clinical picture of chronic pyelitis. Urologic study by means of the cystoscope, ureteral catheter, pyelograms, and cystograms revealed the fact that in the cases in which infection persisted, there was present some form of mechanical obstruction that interfered with kidney or bladder drainage and hence cure was impossible until the mechanical obstruction was removed.

It may not be amiss to emphasize again the fact that our failure to appreciate the role played by mechanical obstruction in every case of persistent pyuria results in useless and needless treatment and that ultimate and irreparable damage to the kidney often results.

The obstructions occur in four places:

1. The ureteropelvic junction.
2. The ureterovesical junction.
3. At or in front of the neck of the bladder (bars at orifice, valves in deep urethra).
4. The central nervous system.

1. Obstruction at the ureteropelvic junction is a relatively common finding in many cases of so-called relapsing pyelitis and in many cases of pyuria without an apparent explanation for the pyuria, as well as in many cases presenting recurring attacks of unexplained abdominal pain. The obstruction may be due to the following:

1. Lesions outside the wall of the ureter.
   (a) adhesions
   (b) aberrant blood vessels
2. Lesions within the wall of the ureter.
   (a) congenital stricture
   (b) acquired stricture
3. Lesions within the lumen of the wall.
   (a) stones
   (b) valves (rare)

Unless the obstruction is relieved by the appropriate surgical procedure, complete destruction of the kidney results. As an illustration, I wish to report the following case:

Case 3. J. S., male, aged ten and one-half years, referred by Dr. Ralph Brown, admitted to the Presbyterian Hospital, May 31, 1934.

PREVIOUS OPERATION.—Appendectomy two years previous to admission to the hospital.

PRESENT COMPLAINT.—About five and a half years ago began to have attacks of pain in the left lumbar region at rather infrequent intervals. The pain was severe enough to keep the patient in bed, did not radiate and gradually subsided with the use of a hot water bottle. A diagnosis of colitis was made and treatment instituted for several years without relief.

During the last year the attacks of pain have been more frequent. During attacks the patient vomits almost continuously. The last attack was accompanied with 1° of fever which promptly subsided with the relief of the pain.

PHYSICAL EXAMINATION.—Negative except a suggestion of palpable kidney on the left side and some tenderness over the left kidney.

ROENTGEN-RAY EXAMINATION. — Negative for stone. Right kidney normal in outline.

INTRAVENOUS PYELOGRAM.—Hydronephrosis of left kidney. Right kidney normal.

CYSTOSCOPIC EXAMINATION.—Bladder normal. The right ureter was catheterized without difficulty or obstruction. Examination of the urine obtained at this time showed:

	Leucocytes per cu. mm.	Gram Smears	Culture
Bladder	0	No organisms	Sterile
Right Kidney	0	No organisms	Sterile

DIAGNOSIS.—Hydronephrosis of the left kidney. Operation advised.

OPERATION, (ethylene and ether anesthesia) June 1, 1934.—Left nephrectomy.

PATHOLOGY.—The kidney was very large. Color normal. Pelvis about the size of a peach. Bipolar blood supply was present. When the kidney was opened, the pelvis showed submucous hemorrhages and an opening between the pelvis and the ureter, pinpoint in size. All of the medulla was destroyed. (Fig. 4).

Fig. 4, Case 2. Pyelogram, showing an enormous dilatation of the right kidney and ureter and a filling defect due to the presence of a stone in the ureter.

Recovery, uneventful. Discharged from the hospital, June 16, 1934.

2. Obstructions at the ureterovesical junction may be due to true stricture formation, or to hypertrophy of the muscle of the ureter as a result of obstruction at or in front of the bladder orifice. This subject has been reported in detail elsewhere.[1]

The treatment consists of relieving the obstruction. In the cases of true stricture, treatment may be carried out by means of dilatation with the ureteral catheter, and, if this fails, it becomes necessary to resort to surgery.

In certain instances it is possible for a patient to have an obstruction at the ureterovesical junction and also at the ureteropelvic junction. As an example of this type of lesion, I should like to present the following case:

Case 4. N. B., female, aged four years, referred by Dr. H. F. Meyer, admitted to the hospital, August 9, 1934.

[1] Dr. H. L. Kretschmer and Dr. W. G. Hibbs, Surg., Gynec. and Obstet., August, 1933, Vol. LVII, pp. 179–186.

Fig. 5, Case 2. Pyelogram, made six weeks after the removal of the stone from the right ureter, shows the disappearance of the dilatation of the kidney pelvis and ureter.

COMPLAINTS.—Puria, fever, dysuria, vomiting.

ONSET and COURSE.—About six weeks ago, following a cold, the child became acutely ill with a temperature of 106°, pus in the urine, and a mass in the upper left quadrant. This was associated with the dysuria and vomiting. The fever and swelling subsided after ten days, but *pus in the urine persisted.*

PHYSICAL EXAMINATION. — Head, neck, heart, lungs, negative; a large palpable mass in the upper left quadrant; genitalia, negative.

EXAMINATION OF URINE—On admission to the hospital showed no albumin, no sugar and no blood but was loaded with pus cells.

BLOOD COUNT.—Red cells 3,780,000; leucocytes 10,350; hemoglobin 75%.

A subsequent blood count at the peak showed 29,600 leucocytes per cubic millimeter.

ROENTGEN-RAY EXAMINATION.—Negative for stone.

INTRAVENOUS PYELOGRAM. — Normal on the right side. Poor visualization on the left side.

CYSTOSCOPIC EXAMINATION.—Bladder, normal. The left ureter was catheterized without difficulty or obstruction. Examination of the urine obtained at this time showed:

	Leucocytes per cu. mm.	Culture
Bladder	132	Hemolytic B. Coli Communis
Left kidney	177	Hemolytic B. Coli Communis

Fig. 6, Case 4. Pyelogram, showing dilatation of the kidney and ureter.

PYELOGRAM.—A pyelogram on the left side showed an enormous hydronephrosis with dilatation of the ureter down to the ureterovesical junction. (Fig. 5).

Following the cystoscopic examination the previously noted mass increased very rapidly in size and was exquisitely tender. There was a rise in temperature and a blood count as high as 29,600 leucocytes per cubic millimeter.

DIAGNOSIS.—Infected hydronephrosis and hydroureter due to a stricture at the ureteropelvic junction and one at the ureterovesical junction.

OPERATION, (ethylene and ether anesthesia) November 16, 1934.—Left nephrectomy.

DESCRIPTION OF SPECIMEN.—The kidney is about twice the normal size. The surface is covered by many petechial areas of redness and some coalescing gray spots. The ureter and pelvis are twice the normal size. The intrarenal portion of the pelvis is markedly dilated with a large amount of dilatation of the calyces so that the kidney tissue covering the tips of the calyces is very thin. The openings at the ureteropelvic and the ureterovesical junctions are narrow. No stones present.

RESULT.—Uneventful recovery. Discharged from the hospital, November 1, 1934.

As larger groups of cases are studied it becomes evident that obstructive lesions are much more common than was formerly suspected.

The two lesions most frequently seen that produce obstruction in the lower urinary tract are median bars and congenital valves in the posterior urethra, and unless the presence of these lesions is recognized early and appropriate treatment instituted, they lead to the death of the patient. Severe renal destruction can be produced by these small lesions. Both conditions have been discussed in previous publications.[1] [2]

The so-called neurogenic bladders in children are rare and most frequently are due to spina bifida, although other lesions of the central nervous system may produce them.

SUMMARY AND CONCLUSIONS

1. In general, children suffer from the same general type of lesions as the adult. Exceptions to this statement are the following:

   (a) Carcinoma is rare in children.

   (b) The kidney is the common site of malignant tumor of the urinary tract in children. It is, moreover, the most frequent malignancy in children with the possible exception of malignant disease of the eye.

2. Obstruction with or without infection is relatively common.

3. Congenital anomalies occur much more frequently than is generally supposed.

4. Chronic pyelitis or pyuria deserves careful study and investigation to determine the factor responsible for the persistence of the infection.

DISCUSSION

Dr. George H. Ewell, (Madison). As Dr. Kretchmer's paper is rather comprehensive and so clearly covers all points that in my discussion I propose to simply reëmphasize some of the points which he has raised.

I should like to repeat for emphasis that infants and children may suffer from practically every urological disease that is known to exist in adults, the one exception perhaps being tumors. Recurrent attacks of pyelitis in children or the finding of a persistent pyuria are probably the two commonest urological conditions that bring these patients to the physician. Specific symptoms or signs referable to the urinary tract which are rather clear-cut and distinct in adults are not so pronounced and obvious in children. A persistent pyuria occurring in a child should warrant every investigation necessary to determine its source. Stasis in the urinary tract due to obstruction is probably the one factor most responsible for this persistent pyuria; congenital anomalies are usually responsible for the obstruction.

Again, as a matter of reëmphasis, I should like to mention several of the points which were brought out by Campbell in his study of 402 cases of chronic pyuria in children. In his series the ages range from birth to fifteen years and was nearly three times as common in females as in males. The largest number of cases occurred between the ages of seven and ten and the largest group in the series had symptoms of between one and two years' duration before urologic investigations were carried out. No doubt, in many instances, a chronic pyuria was allowed to exist because the parents did not wish the child to undergo cystoscopic and urological examination. Children stand cystoscopic manipulation exceedingly well. A great many of the patients, especially girls, may be examined under local or without anesthesia and in other cases caudal anesthesia may be employed; thus the parent is spared the idea of a general anesthesia for this examination. With the advent and development of excretion urography the use of this procedure in many cases will demonstrate pathological findings and even though cystoscopy may be necessary, with the preliminary findings obtained by excretion urography, the parents are usually anxious to cooperate further.

In the treatment of chronic pyuria, which may be medical or surgical, in many instances radical surgical procedures are necessary which perhaps in many instances could be avoided if the patients were seen earlier. Campbell, in his 402 cases, was forced to do 36 nephrectomies, an operation which the present day urologist tends to avoid, if possible, and certainly more so in children. It is encouraging to note from Campbell's statistics that almost half of the cases were treated by medical means alone and follow-up records showed 82 cured and 192 improved.

[1] H. L. Kretschmer, and W. G. Hibbs: Surg., Gynec. & Obstet., August 1933, Vol. LVII, pp. 170–186.

[2] H. L. Kretschmer, and L. E. Pierson: Amer. Jour. Dis. Child., 1928, Vol. XXXVIII, p. 804.

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« « « EDITORIALS » » »

Hematuria

MANY reviews of this old and important subject have been written during the past years. It is, therefore, not my intention in presenting this one to attempt anything new. Hematuria, while many times neglected by a patient, usually alarms him and leads him to consult his physician. However, like pain, unless present at all times or in sufficient quantities to color the urine, it is apt to be neglected. Since the majority of hematurias require cystoscopic examination and frequently pyelography, a great many patients, after having been advised by their attending physicians to have such examinations, fail to do so. For this class of patients there is nothing we can advise. The writer feels, however, that for the great majority of patients, if the physician has a general knowledge of the varieties and causes of hematuria and will undertake a discussion with his patients, they will probably be more impressed with the seriousness of the symptom and more apt to accept the advice of the physician to have the proper and necessary examinations made.

Hematuria, which is defined as the discharge of urine containing whole blood, implies no differentiation between gross and microscopic amounts of blood. The occasional finding of a few red blood cells in the routine study of the urine is not uncommon in the absence of surgical lesions of the genito-urinary tract, so that unless the blood is persistent or is associated with other symptoms, it has little clinical significance. The persistent presence of even a few red blood cells in the urine usually denotes a lesion in or adjacent to the urinary tract and hematuria of this type is of real clinical significance.

Approximately 4% of all admissions to a general hospital give a history of hematuria. MacKenzie found hematuria in 21% of 3,800 patients admitted with urogenital disease; Wear, in 15% of 550 consecutive cases sent for cystoscopic examination. These figures thus very impressively show that with few exceptions, hematuria is symptomatic of disease primarily resident in the genito-urinary organs. As to the comparative incidence of hematuria from the upper and lower urinary tracts the combined statistics in over 1,000 cases (1906) with hematuria show an average incidence of 40% from the upper urinary tract and 60% from the lower urinary tract.

Hematuria occurs at all ages; the great majority, however, occur between the ages of 30 and 60. Denoclara, in a collected series of 132 cases of mixed tumors of the kidney in children, found hematuria in 39%.

The duration of hematuria, a most important point, presents many interesting features. Wear, in a study of 83 cases, found that less than 10% came during the first week or during their first attack of hematuria. The shortest duration in his series was one day and the longest nineteen years, an approximate average of one year. In his series of 83 cases, there were 16 bladder tumors and the average duration of hematuria had been 6.1 months; their delay in seeking aid, therefore, does not permit of early diagnosis and consequently less expectancy of cure. Wear noted the amount of blood with relation to the pathology present. Grading on a basis of I, II, III, and IV, he found 28 patients who had blood III or IV. Of this group, 14 had bladder tumors and two had hypernephromas. In the group of 28, only three patients had lesions that would be considered as minor in nature. Forty-one patients showed blood I or II; six had renal tuberculosis and two bladder tumors. The great majority of the remainder were inflammatory lesions.

Women are very prone to neglect hematuria as they are accustomed to seeing blood in the urine during the menses and usually conclude that it is coming from the vagina. As to the source of the blood, some idea can be obtained by examination of a three glass specimen of urine. If the urethra is the source of the bleeding and in the urethra distal to the external sphincter, blood will exude from the meatus independent of the act of voiding, the first glass will be stained and the second and third comparatively clear.

If the urethra above the external sphincter is the source of the blood, there will be no bleeding between voidings. The first glass will contain blood, while the second and third will be clear, providing the bleeding is light or moderate in amount. If the bleeding is of a large enough quantity, it will fill the posterior urethra and drain into the bladder between voidings; the second and third glasses then will be blood-stained.

With bleeding from the prostate or lesions in the posterior urethra of insufficient quantity to flow into the bladder the first glass will be bloody, the third glass may, and usually does, contain a much larger amount of blood than the second glass, owing to the compression exerted by the muscles emptying the urethra.

Blood coming from above the vesical sphincter is usually mixed with the urine regardless of its source, and the three glasses are usually equally colored.

The old statement that an increase of blood at the termination of voiding indicates hematuria of vesical origin is not entirely accurate, since blood of renal origin may collect in the bladder base and be expelled in large quantities as a terminal hematuria and the third glass thus be more grossly bloody than the second. Generally speaking, however, a terminal hematuria usually denotes that the bleeding is vesical, prostatic or from the posterior urethra. When all three glasses are bloody, there are several diagnostic points of significance. First, the presence of the worm-like ureteral casts of blood clot which are pathognomonic of bleeding above the bladder which may be ureteral or renal in origin. Second, the presence of blood casts or cylinders which are pathognomonic of bleeding from the renal parenchyma.

CONCLUSIONS

Over 50% of hematurias are due to lesions primary in the urinary tract.

Approximately 50% of massive hematurias are due to tumors of the bladder.

The majority of renal hematurias are microscopic.

The majority of renal tumors are associated with hematuria and in approximately 75% of the cases there is gross hematuria.

Hematuria, as a symptom, demands complete urologic investigations except in those cases that are obviously extra-urinary in origin. G. H. E.

BILLS FOR WPA ACCIDENT CASES

The attention of all members handling accident cases for traumatic injuries to WPA employees is directed to the article on the foot of page 858 of this issue. There will be found the latest instructions issued by the U. S. Employees' Compensation Commission for the filing of physicians' statements.

These must be carefully followed if statements are to be honored promptly by the Commission.

. . . . THE PRESIDENT'S PAGE . . . .

Our Permanent Advance

IN ASSUMING the office of President of the State Medical Society of Wisconsin for the ensuing year, my only aim and desire is to discharge the duties of this office to the best of my ability, and to promote the interests of organized medicine in every way possible. To this end, I shall need the aid and cooperation of every member. To many of the members I am personally unknown, and for the benefit of those, especially, to whom I am only a name, and in order to bring about a certain degree of acquaintanceship, so to speak, it appears to me that a free expression of my views on one or two important subjects is in order.

As I have stated elsewhere, after a fairly extensive study of the subject, I am opposed to State Medicine, at least so far as any system now in operation is concerned, and as regards any scheme or plan for the wholesale delivery of medical service which has heretofore been proposed. At the same time, I shall endeavor to keep an open mind, and if, in the future, a plan should be evolved in which the *permanent* advantages to both the public and medical profession outweigh the disadvantages, I feel that it should be given serious consideration. But, at the present time, there is no plan which even begins to meet this requirement.

It is my conviction, (because I can find no facts to support any other view), that the present agitation for state medicine, better medical care for the American people, or whatever else it may be called, is nothing other than propaganda promulgated by the great foundations and certain self-exalted and self-interested theorists in their employ. There has not been, and is not now, any great and widespread dissatisfaction on the part of the public with the medical care which they have been receiving. But such a condition cannot obtain much longer; the constant reiteration of a statement with no refutation of it, will eventually lead to a belief in the truth of the statement on the part of the average individual.

Therefore, the task now confronting the medical profession of this and every other state is the counteracting of this propaganda. The duty devolves upon each individual practitioner of medicine. I believe that the threat of state medicine is a very real one. Even though the agitation for it has apparently died down somewhat in the past few months, we should not allow ourselves to be lulled into a state of false security because this agitation will undoubtedly again be revived and probably with more force than ever.

Within the past few weeks, a survey of chronic illnesses and physical impairments in the general population has been begun, under the auspices of the United States Public Health Service, in cooperation with state and city health departments. According to the Journal of the American Medical Association, "It is understood that the stimulus for this survey came from the Secretary of Labor and that it meets with administration approval. It is expected to throw light on the problem of medical care for the people. . . . The survey is to be carried on in nineteen states divided into five areas, which will include large cities, smaller cities, farms, and rural communities." If this survey is thoroughly and impartially conducted so as to truly represent a cross section of a large area of our population; if the results obtained are thoroughly and impartially evaluated, with all influencing factors taken into full consideration, much valuable information which has hitherto been lacking may be secured, and this information may help a great deal in the solution of many of our medical economic problems. On the other hand, in drawing the final conclusions, by the suppression of certain facts, by the over-emphasis of certain others, and by the statement of half-truths, such surveys may be made to seem to favor a desired point of view. We have reason to think that this has been done in the recent past, and we have no reason to believe that it may not be done in the future. Keeping this in mind,

and taking into consideration the attitude of the present national administration toward "social security", including state medicine, is there not room for a certain amount of suspicion that this survey may be but a preliminary to a renewed drive for socialized medicine? In any event, the survey is of vital interest to the entire medical profession, and must be closely watched.

Is it merely a coincidence that the high schools this year are to debate the subject of socialized medicine? If it could be ascertained where and by whom this topic was primarily selected, the knowledge would undoubtedly prove to be highly interesting, and might furnish an answer to the foregoing question. We need have no doubt but that the participants in these debates will be furnished ready access to much material in favor of socialized medicine: for this reason, it is up to each and every doctor to be ready with material which presents the view of organized medicine on the subject, and to see that this material is utilized. If these debates are propaganda, it can only be counteracted by our own efforts; no one else is going to do it for us. Our State Medical Society is already working hard to this end.

This brings me to the subject of organization in medicine, of the value of which I am very firmly convinced. Under present day conditions, the successful individualistic practice of medicine, as our forefathers knew it, and as some of us have practiced it in years gone by, is no longer possible. In the interests of self-preservation, we are forced into group practice, and if we do not realize this fact, we are lost. By "group practice", however, I do not mean small clinical groups, which are only another form of individualistic practice. The groups to which I refer are primarily the local county societies, then the state societies, and finally the national medical organization. Although all of the groups just mentioned were primarily and originally formed for scientific purposes, changing conditions have forced upon them the necessity for taking cognizance of other things.

State medicine and other legislative problems, workmen's compensation, the public health, the care of the insane, to mention only a few,—all of these affect the practice of medicine, and are the direct concern of the profession. As individuals, we can do nothing about any of them; as organizations, we can do everything, both in our own interests and in the interests of the public. In short, it is only by organized effort that we can satisfactorily solve our problems; lacking this, they will be solved for us, and probably not to our complete satisfaction, by those who are immeasurably less capable of solving them than we are ourselves, but who see a chance to further their own ends in these activities.

Every eligible practitioner of medicine should belong to his county society; it is not only his duty, but it is necessary for the furtherance of his own interests. And his duty as a member is not discharged by merely paying his dues; he should also attend the meetings and take an active part in the Society's affairs. While individual practitioners can undoubtedly do much toward presenting the viewpoint of the medical profession among their own patients, and while such work on the part of individuals is of inestimable value, nevertheless the county societies represent the real point of contact with the public in the larger sense, and it is only through the county societies as the primary unit that legislative and other problems can be successfully attacked. For this reason, every member owes it to himself to take the meetings seriously, and to make every effort to attend them regularly. Important communications are constantly being sent out to the various county societies; these should be given the serious attention which they deserve, and not acted upon hurriedly and without due consideration. To properly fulfill its functions today, the county society must become a deliberative assembly in fact.

Your state officers and the members of the various state committees are giving their best efforts to the performance of their respective tasks; they need the support of every member, and will do their best to deserve it. To this end, frank criticisms and suggestions will always be welcome; in no other way are we able to ascertain whether or not our work meets with your approval.

Ralph M. Carter.

Society Proceedings

BARRON—WASHBURN—SAWYER—BURNETT

A meeting of this Society was held on October 29th at the Cumberland Hotel, Cumberland. After the dinner at six-thirty o'clock, the following papers were given:

"Indications For and Uses of Blood Transfusion" by Dr. Donald K. Bacon, St. Paul, Minn.

"Diagnostic Significance of Abdominal Pain" by Dr. Joseph F. Borg, St. Paul, Minn.

BROWN-KEWAUNEE-DOOR

Dr. Edward F. Barta, Milwaukee, gave an illustrated talk on "Malignancies of the Skin" before the Brown-Kewaunee-Door County Medical Society at Alaska, Wisconsin, on October 25th.

CHIPPEWA

A meeting of the Chippewa County Medical Society was held on October 23rd at the Hotel Northern, Chippewa Falls. The following papers were presented:

"Allergy" by Dr. C. K. Maytum, Rochester, Minnesota.

"Syndromes Associated with Diseases of Pituitary Body and Suprarenal Glands" by Dr. E. J. Keppler, Rochester, Minn.

CLARK

A meeting of the Clark County Medical Society was held at Dorchester on September 26th. Election of officers was held, the following being chosen: Dr. M. C. Rosekrans of Neillsville, President; Dr. F. P. Neis of Thorp, Vice-President, and Dr. G. G. Shields of Abbotsford, Secretary-Treasurer.

Following the usual business meeting, papers were read by Dr. G. G. Shields, who spoke on "Trichinosis" and Dr. F. P. Foley of Dorchester, who discussed "Whooping Cough".

Dr. V. A. Gudex of the State Board of Health was also present and urged a campaign of tests for tuberculosis for all grade school children. A.H.K.

CRAWFORD

The members of Crawford County Medical Society met at Gays Mills for their annual meeting on October 9th. The following officers for 1936 were elected: President, Dr. J. M. Sullivan, Prairie du Chien; Dr. George Maloof, Wauzeka; Vice-President; Dr. C. A. Armstrong, Prairie du Chien, Delegate; Dr. E. T. Ackerman, Alternate Delegate; Secretary, Dr. C. A. Armstrong. C.A.A.

DANE

The Dane County Medical Society met on October 8th in the Crystal Ballroom of the Loraine Hotel, Madison. Following the dinner, the program was presented.

Dr. Frederick Willius of the Mayo Clinic talked on "Progress of Coronary Disease".

Dr. Waltham Walters, also of the Mayo Clinic, spoke on "The Surgical Aspects of Obstructive Jaundice".

A general discussion followed each paper.

Dr. Frank K. Dean of Madison was elected to membership in the Society. N.T.

FOND DU LAC

Dr. Cleveland J. White, assistant professor of dermatology, Northwestern University Medical School, spoke on "Ten of the Most Common Skin Diseases, With Special Reference to Diagnosis and Treatment of Ringworm, Acne and So-Called Eczema and Impetigo" before a meeting of the Fond du Lac County Medical Society on October 10th at Fond du Lac. Members of Brown-Kewaunee-Door, Outagamie, and Winnebago societies were also invited to attend.

LINCOLN

At a meeting of the Lincoln County Medical Society held on October first, the following officers were elected: President, Dr. Rowe Baker, Tomahawk; Vice-President, Dr. K. A. Morris of Merrill; Secretary-Treasurer, Dr. L. J. Bayer of Merrill; Delegate, Dr. R. J. Henderson, Tomahawk, and Dr. F. C. Lane, Merrill, Alternate Delegate. F.C.L.

MILWAUKEE

The October meeting of the Medical Society of Milwaukee County was held on October 11th in the Elizabethan Room, Milwaukee Athletic Club.

Dr. W. P. Blount, Milwaukee, spoke on "The After-Care of Paralytic Poliomyelitis" and Dr. Maurice Brodie, research investigator, New York City Health Department gave the Lippitt Memorial Lecture on "Poliomyelitis: Its Transmission, Prevention, and Treatment".

The social hour concluded the meeting.

OUTAGAMIE

Dr. Rock Sleyster, Wauwatosa, was the guest speaker at the joint meeting of the Outagamie and Waupaca County Medical Societies held on October 4th at New London. His subject was "The Patient with Chronic Complaints".

PIERCE—ST. CROIX

At a meeting of the Pierce-St. Croix Medical Society held at the Hotel Hudson in Hudson on October 17th, the following officers were elected for the ensuing year:

President, Dr. J. W. Livingstone, Hudson; Vice-President, Dr. Bartholomew Kunny, Baldwin; Sec-

retary-Treasurer, Dr. A. E. McMahon, Glenwood City; Censor (three years), Dr. G. M. Dill, Prescott; Delegate, Dr. A. E. McMahon and Alternate Delegate, Dr. O. H. Epley of New Richmond. A.E.M.

POLK

The regular meeting of the Polk County Medical Society was held at Centuria at the home of Dr. G. B. Noyes. This being the fifth anniversary of the Polk County Medical Society, election of officers was held. Dr. J. A. Riegel, St. Croix Falls, was reelected President for another year; Dr. W. C. Andrews, Vice-president, and Mr. Earl C. Swenson, secretary-treasurer for another year. E.C.S.

ROCK

A meeting of the Rock County Medical Society was called for October 22nd at 8:00 P.M., at the Hotel Hilton, Beloit.

The applications for membership of Dr. Stuart Cullen and Dr. E. R. Muntz were reported approved by the board of censors and accepted by the Society.

The Society voted to sponsor radio broadcasting as outlined by the American Medical Association over station WCLO of Janesville.

Dr. P. A. Fox, Beloit, reported the proceedings of the House of Delegates at the Milwaukee meeting in September.

Dr. Robert E. Burns, Madison, was then introduced, who presented his illustrated lecture on "Some Orthopedic Problems." C.N.N.

TREMPEALEAU—JACKSON—BUFFALO

The monthly meeting of this Society was held at Independence on October 17th. A six o'clock dinner was served at the Hotel Independence after which the business meeting was held.

WOOD

A meeting of the Wood County Medical Society was held at Wisconsin Rapids on October 15th at six-thirty o'clock. Speakers on the program were the following:

Dr. R. P. Potter, Marshfield, who spoke on "X-Ray Therapy in Malignancy".

Dr. F. A. Boeckman, Marshfield, who discussed "Prevention of Scarlet Fever".

Dr. W. A. Ladwig, Wausau, whose subject was "Anesthesia" and Dr. W. W. Stiles of Arpin, who talked on "Multiple Myeloma".

MILWAUKEE ACADEMY OF MEDICINE

A meeting of the Milwaukee Academy of Medicine was held on Tuesday, October 15th, at eight o'clock P. M. Following is the program which was presented:

Presentation of clinical cases, specimens and roentgenograms.

"Ombredanne's Pouch Operation for Hypospadias" by Dr. Stanley J. Seeger.

"Postoperative Pulmonary Collapse" by Dr. W. J. Carson. Discussion opened by Dr. L. M. Warfield.

"Etiology and Treatment of Strabismus" by Dr. John B. Hitz.

MILWAUKEE OTO-OPHTHALMIC

A demonstration of the Wever-Bray Auditory Experiment by Drs. Meek, Eyster, and Krasno of the Department of Physiology, University of Wisconsin, constituted the program of the Milwaukee Oto-Ophthalmic Society's meeting on October 8th.

MILWAUKEE NEURO-PSYCHIATRIC

An October dinner-meeting of the Society was held on October 31st at Madison. The scientific program was as follows:

"The Human Constitution as the Biologist Sees It" by Prof. Michael Guyer, Chairman of the Department of Zoology, University of Wisconsin.

"The Present Status of the Endocrine Glands: Therapeutic Applications" by Dr. Elmer L. Sevringhaus, Madison.

"Allergy and the Central Nervous System" by Dr. W. A. Mowry, Madison.

Presentation of neurological cases by members of the Neuropsychiatric Department, University of Wisconsin.

MILWAUKEE SOCIETY OF CLINICAL SURGERY

A meeting of this Society was held on Tuesday, October 22nd, at the University Club of Milwaukee. The scientific program presented was as follows:

1. The Present Day Treatment of Head Injuries by Dr. J. J. Adamkiewicz, Milwaukee.
2. Common Duct Stones—Their Diagnosis and Treatment by Dr. A. W. Allen, Instructor in Surgery, Harvard University.
   Discussion by Dr. Max Bornstein, Milwaukee.
3. Surgery of the Thyroid Gland by Dr. H. M. Richter, professor of surgery, Northwestern University.

The scientific program of this Society which will be presented following the dinner at the University Club of Milwaukee on November 26th is as follows:

"Some Fracture Problems" by Dr. A. R. Colvin, associate professor of surgery, University of Minnesota.

"Inflammatory Tumors of the Cecum Simulating Appendicitis" by Dr. Frederick Christopher, associate professor of surgery, Northwestern University.

"Postoperative Anuria" by Dr. R. I. Hiller of Milwaukee.

FIRST DISTRICT

Upwards of fifty physicians attended the annual meeting of the First Councilor District Society, composed of Dodge, Jefferson, and Waukesha counties which was held at the Elks Club in Watertown on the afternoon and evening of October 24th. The following program was presented:

2:00 P.M. Registration.

2:30 P.M. "The Anatomy and Physiology of the Heart" by Dr. Eben J. Carey, Dean, Marquette University School of Medicine.

4:00 P.M. "The Diagnosis and Management of Heart Disease" by Dr. Francis D. Murphy, Professor of Medicine Marquette University School of Medicine.
5:00 P.M. Discussion.
5:30 P.M. Recess.
6:30 P.M. Dinner and entertainment, Elks Club.

Following the duck dinner, Dr. Eben J. Carey, spoke on "Some Social and Economic Aspects of Medical Education Today".

Others called upon during the course of the evening included Dr. A. W. Rogers, Councilor of the District; Dr. S. E. Gavin, President-elect; Dr. D. J. Twohig, President of the Sixth Councilor District; Dr. F. D. Murphy, Milwaukee; Dr. J. F. Wilkinson, Oconomowoc, and Mr. J. G. Crownhart, Secretary.

Dr. H. P. Bowen, Watertown, President of the District, presided at the afternoon and evening sessions.

Dr. J. F. Wilkinson of Oconomowoc was elected President of the District for the ensuing year and the retiring President, Dr. H. P. Bowen, was elected Secretary. Dr. A. A. Hoyer, Beaver Dam, was elected Vice-President. The 1936 meeting will be held in Waukesha County.

NINTH COUNCILOR DISTRICT

The autumn meeting of the Ninth Councilor District was held at Wausau, on October 30th. A dinner was served at the Hotel Wausau at six o'clock after which the following program was given:

E.E.N.T. MEETING

On Saturday, January 11, 1936, there will be held at the Schroeder Hotel in Milwaukee an all-day meeting of the middle section (Wisconsin, Illinois, Michigan, Indiana, and Ohio) of the American Laryngological, Rhinological and Otological Society.

An excellent program has been prepared. This meeting will be open to all physicians. Dr. W. E. Grove, 324 E. Wisconsin Ave., Milwaukee, is Vice-President of the Society for the middle section states.

"Glucose and Its Uses" by Dr. W. C. Frenzel, Wausau.

"Trichinosis" by Dr. G. G. Shields, Abbotsford.

"Anesthesia" by Dr. John S. Lundy, of the Section on Anesthesia, Mayo Clinic, Rochester.

SIXTH DISTRICT

At a meeting of the Sixth Councilor District Society, Dr. D. J. Twohig of Fond du Lac was elected President, Dr. P. R. Minahan of Green Bay, Vice-President, and Dr. A. M. Hutter of Fond du Lac, was chosen Secretary.

Dr. Cleveland J. White, assistant professor of Dermatology, Northwestern University Medical School, was the guest speaker and had for his subject, "The Ten Most Common Skin Diseases, Their Causes and Treatments".

THE WOMAN'S AUXILIARY

President—
Mrs. F. Gregory Connell, 420 Washington Blvd., Oshkosh
President-Elect—
Mrs. C. A. Harper, 520 N. Pinckney St., Madison
Secretary—
Mrs. Theodore J. Gunther, 2117 N. 8th St., Sheboygan
Treasurer—
Mrs. Frank W. Pope, 2406 Kinzie Ave., Racine
Public Relations Chairman—
Mrs. Arthur J. Wiesender, Berlin
Program Chairman—
Mrs. Ralph M. Carter, 622 S. Webster Ave., Green Bay
Hygeia Chairman—
Mrs. Harold M. Coon, River Pines Sanatorium, Stevens Point
Organization Chairman—
Mrs. Arthur Sullivan, 930 E. Gorham St., Madison
Archives and Historian—
Mrs. C. A. Harper, 520 N. Pinckney St., Madison
Press and Publicity Chairman—
Mrs. Earle F. McGrath, 429 W. 6th St., Appleton
Parliamentarian—
Mrs. Robert E. Fitzgerald, 1739 69th St., Wauwatosa
Chairman of Nominating Committee—
Mrs. Arthur J. McCarey, 902 S. Madison St., Green Bay

The March of Medicine on the Air

STIRRING episodes in the advance of medical science are dramatized in vivid form by the American Medical Association each Tuesday afternoon at 4:00 P. M., central standard time, over the Blue Network of the National Broadcasting Company.

Under the general title of "Medical Emergencies and How They are Met", the advancement of medical science through the services of the family physician is broadcast and is presented to the public in a weekly portrayal that is dramatic in its form. This broadcast may be received over stations WJZ, New York; KDKA, Pittsburgh; WENR, Chicago; WIBA, Madison; KSTP, St. Paul and WEBC, Superior and Duluth.

One or more of these stations can be heard through day-time reception in every portion of Wisconsin, and members of the Auxiliary are urged to listen to the next program.

Common household emergencies will be dramatized at 4:00 P. M., Tuesday afternoon, November 19th, and automobile accidents on Tuesday afternoon, November 26th. Announcements of later programs will be made in Hygeia.

The Auxiliary is called upon to aid in this radio program of the American Medical Association for the dissemination of health knowledge. Specifically, Dr. W. W. Bauer, director of the bureau of health and public instruction of the American Medical Association, asks members of the Woman's Auxiliary to:

1. Listen to the program so that you will know what it is.
2. If the local NBC station does not take it, ask them to do so.
3. Write letters to the National Broadcasting Co., if you like the program, and to the A.M.A. if you do not, stating WHY.
4. Tell your friends about it.
5. Tell organizations about it, especially those to whom it may be useful—Women's Clubs, Child Study Groups, Parent-Teacher's Associations, *schools.*

A History of Your County Auxiliary

"ARCHIVES are the meat and drink of the historian, and the Auxiliary is, I firmly believe, destined to occupy so important a place in organized medicine that all details of its founding and development are of real value. How many auxiliaries have preserved, in addition to their minutes, all the facts concerning their organization, the important preliminary correspondence, a complete membership file, a complete list of officers and committee chairmen, the names of those addressing the auxiliary, with dates and titles of their subjects, programs of all meetings, and other data? Only those who have attempted to gather such material after the lapse of only three or four years can have any idea of the chaotic condition of most early records. . . . Now, however, as the vision of the future enrolls before our eyes, and while the founders are still with us to establish the facts, let us all hasten to write them down before they are lost forever."

The above paragraph is an excerpt from the inaugural address presented by the late Mrs. Walter Jackson Freeman at the Tenth Annual Meeting of the Woman's Auxiliary to the American Medical Association at New Orleans, May, 1932.

In the event a county auxiliary desires to prepare a history of its organization, it should contain an account of the early organization—by whom organized, others co-operating, time and place of meeting, as well as officers elected, membership or charter members. The history should contain a record of each subsequent year—officers, members who have held state or national office, activities, health education, HYGEIA, special projects and significant dates. Be sure to date everything.

It is hoped that in the near future every county auxiliary will see that a history of its organization is prepared. You cannot start this project too soon.

(Mrs. C. A.) Elisabeth Bowman Harper, Madison, State Historian and Chairman of Archives.

County News Items

Dane County

Aims of the National Auxiliary were presented to members of the Dane County Auxiliary at its October meeting on the 8th. Mrs. Fitzgerald pointed to the fact that medical organizations have accomplished more in the interest of public health than could possibly be accomplished by individuals working alone.

Mrs. A. G. Sullivan, Madison, is serving as President of the Dane County Auxiliary; Mrs. Homer Carter, Vice-President; Mrs. A. W. Bryan, Treasurer and Mrs. Charles Lyght, Secretary.

Grant County

Members of the Grant County Auxiliary met at the Lancaster country club on September 30th. A

one o'clock luncheon was served after which the regular meeting was conducted, the President, Mrs. G. C. Buck of Platteville, presiding.

Milwaukee County

The October meeting of the Milwaukee County Auxiliary combined a luncheon and style show in which the mannequins were all members of the Auxiliary. The meeting was held in the Crystal Ballroom of the Schroeder Hotel and bridge was enjoyed following the style show.

Mrs. R. E. Fitzgerald, President-elect of the National Auxiliary, resigned as President-elect of the Milwaukee County Auxiliary. Mrs. W. M. Jermain of Milwaukee was appointed President-elect to fill the vacancy caused by Mrs. Fitzgerald's resignation. The Public Relations Committee announced a tour of the Convalescent Home of Milwaukee Children's Hospital on October 24th.

Outagamie County

The Outagamie County Auxiliary held a luncheon meeting on October 15th at the home of the President. Twenty-six members attended. Interesting reports on the state convention were given by the delegates. Articles from Hygeia and from the medical journals were read and discussed. Plans were discussed for the next meeting in December.

Rock County

The Auxiliary to the Rock County Medical Society held its October meeting on the 22nd at Beloit. It was a dinner meeting and was held at the home of Mrs. F. E. Brinckerhoff. Following the dinner and meeting, Dr. R. F. Wilson of the Beloit Municipal Hospital addressed the Society on "Cancer".

Waukesha County

The Auxiliary to the Waukesha County Medical Society met on October 2nd at the Avalon Hotel, Waukesha. The President, Miss Voge, presided. Plans for the coming year were discussed.

News Items and Personals

Dr. Francis D. Murphy, Milwaukee, spoke on "Nephritis" at a meeting of the Eau Claire Clinic on October third. While in Eau Claire, Dr. Murphy also addressed members of the Kiwanis Club on "Some Aspects of Progress in Medicine During the Last Twenty Years".

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On Tuesday evening, October 8th, Dr. J. E. Donnell of Cuba City presented the address and motion picture on "Cancer: Its Life History and Control" at a public meeting in the Masonic Hall. This is the address which has been made available to all members of the State Medical Society through its Cancer Committee.

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Dr. Hans Schneider of Dousman is taking a three-months' course in general surgery, medicine, and obstetrics at the Cook County Graduate School of Medicine, Chicago, Ill.

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A postgraduate clinic to which physicians from southwestern Wisconsin and northern Illinois were invited, was held at the Jackson Clinic, Madison, on Saturday, October 5th. Members of the staff of Marquette University School of Medicine and of the Jackson Clinic staff presented the program. The speakers were: Dr. Eben J. Carey, Dean of the Marquette University School of Medicine; Dr. Carl H. Davis, Milwaukee; Dr. F. M. Stratton, Milwaukee; Dr. Francis D. Murphy, Milwaukee; Dr. S. E. Gavin, Fond du Lac, President-elect of the State Society; Dr. H. E. Marsh, Madison; Dr. Jerome T. Jerome, Madison; Dr. H. H. Freeman, Madison, and Dr. Arnold S. Jackson, Madison.

Following the luncheon held at the Loraine Hotel at noon, the visiting physicians and their wives attended the Marquette–Wisconsin football game.

RADIO PROGRAM

Radio health messages are presented by the State Medical Society each Tuesday, Wednesday and Thursday morning at 9:00 A. M.

These talks are broadcast over the State-Owned Radio Stations,—WHA (940), Madison, and WLBL (900), Stevens Point.

The schedule for this month follows:

November 12—The Itch
November 13—Hiccups
November 14—Food Foolishness
November 19—The Digestive System
November 20—Secretion Factories
November 21—The Appendix
November 26—Shingles
November 27—Old Superstitions About the Insane
November 28—A Common Parasite
December 3—Birthmarks and Moles
December 4—Analysis of Urine
December 5—Tricks of Trichinae
December 10—Straight as a Ramrod
December 11—What is a Mastoid
December 12—Dame Nature's School

Dr. T. H. Nammacher of Oconomowoc left on September 27th for New York City where he will take postgraduate work at New York Polyclinic Medical School and Hospital.

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The Superior Clinical Society which has been recently formed is composed of physicians in Superior who meet each Tuesday in St. Mary's Hospital. The

purpose of the organization is to make available current literature on problems in medical practice which will be reported upon at the various meetings. The following are members: Drs. J. W. McGill, H. A. Sincock, R. C. Smith, L. W. Beebe, John Baird, E. A. Myers, A. G. Wilcox, C. H. Christiansen, V. E. Ekblad, J. R. Goodfellow, W. E. Ground, G. J. Hathaway, T. J. O'Leary, H. J. Orchard, S. H. Perrin, F. C. Sarazin, J. H. Weisberg and G. L. Berdez (Duluth).

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At the annual meeting of the American Hospital Association held in St. Louis in October, Dr. R. C. Buerki, superintendent of Wisconsin General Hospital, Madison, became president of that Association. At the present time, Dr. Buerki is also serving as President of the Wisconsin Hospital Association.

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Dr. Maurice G. Rice of Stevens Point is taking a two-year postgraduate course in surgery and urology at the University of Pennsylvania. Upon completion of his work, he plans to return to Stevens Point to continue practice with his brother, Dr. R. W. Rice.

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Dr. E. A. Pohle, Madison, attended the Medico-Military Symposium at the Mayo Foundation, Rochester, from October 6 to October 12. He holds a commission of Lieutenant-Commander in the Naval Medical Reserve.

On October 10th, he addressed the Chicago Roentgen Society at the Palmer House, Chicago, on "Roentgen Therapy in Leukemia, Hodgkin's, and Allied Diseases with Special Consideration of General Body Exposure."

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Dr. R. G. Sayle of Milwaukee announced his retirement from active practice on November first. He will limit his future work to consultation in caring for established patients.

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Dr. F. E. Kosanke, formerly of Lomira has moved to Watertown to practice. Previous to going to Lomira four years ago, he had practiced at Watertown.

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Dr. B. A. Warren, who has been on the staff of the Government Hospital at Tucson, Arizona, for the past fifteen years, has taken over the practice of the late Dr. M. V. Dewire at Sharon.

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Dr. Carl C. Vogel, Elroy, and Dr. R. V. Williams of Rushford, Minnesota, left on September 23rd for Honolulu via New Orleans, Cuba and Panama Canal. They expect to be gone about two months.

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Dr. Albert H. Stahmer, who served his internship at Milwaukee County Hospital, Wauwatosa, and who for a short time was connected with the Sheboygan Clinic, has opened private offices at Wausau for the general practice of medicine.

Dr. Arnold Jackson, Madison, spoke at a meeting of the Southeastern Iowa Medical Society in Muscatine on the question of "The Prevention of Goiter". In October he also addressed the Linn County Medical Society at Cedar Rapids, Iowa, and the Mason City Medical Society on the "Diagnosis and Treatment of Toxic Goiter".

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The Sauk County Medical Society was honored in an interesting exhibit of the State Board of Health at the annual meeting of the American Public Health Association which met in Milwaukee in October.

In 1876 the Sauk County Medical Society was largely instrumental in effecting the formation of the State Board of Health and this fact was portrayed in an oil poster, showing two figures representing the Sauk County Medical Society and the State Legislature, planting the sapling which represented the State Board of Health. To the right appeared the tree which grew from the sapling and its limbs were numbered to represent the chief fields of activity in which the Board is now engaged.

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In order that conflicting dates may be obviated as much as possible during the coming year, the Wisconsin General Hospital (Madison) staff meetings will be held on certain Tuesday nights beginning at 7:45, avoiding the second Tuesday night of each month, on which occasion the Dane County Medical Society meets. It is hoped that insofar as possible the University Medical Society may hold its meetings on the remaining Tuesday night of the month insofar as that is found possible. Thus physicians will be able to reserve Tuesday nights as probable medical meeting nights throughout the year. By this plan the Committee hopes to avoid much confusion which has occurred in the past.

Staff meetings in November will be as follows: November 5th—Certain Blood Diseases; November 19th, Shock.

In December, the following subjects will be discussed: December 3rd—Cryptorchidism; December 17—Tuberculosis (fundamental questions relating to the organism and early diagnosis).

MARRIAGES

Dr. William H. Studley, son of the late Dr. F. C. Studley, Milwaukee, to Mrs. Doherty A. Spofford of New York, at New York City on September 14th.

Dr. Frank E. Drew, Milwaukee, to Miss Irene Wollaeger, at Pine Lake on September 7th.

Dr. Frank Karstens Dean, son of Dr. and Mrs. Joseph Dean, Madison, to Miss Gladys Paust, daughter of Mr. and Mrs. Martin Paust, Columbus, Wis., on September 30th at Madison.

Dr. Glenn R. Stauff, Green Bay, to Miss Mildred Witters of Hilbert, Wisconsin, on October 11th.

Dr. Donald C. Wilkinson, Oconomowoc, to Miss Ruth Halloran of Des Moines, Iowa, on October 12th.

Dr. George W. John, Beloit, to Miss Pauline F. Poudrier of Beloit on October 15th.

DEATHS

Dr. Philip R. Fox, Madison, died on October second at his home after a long illness. Dr. Fox was the son of the late Dr. Philip Fox, Sr., who served as a surgeon in the Union Army during the Civil War, and who died in 1932.

Dr. Fox was born in the town of Fitchburg, Dane County, June 23, 1867. He received his early education at Jesuit College, Prairie du Chien and Sacred Heart College at Watertown, and graduated from Rush Medical College in 1890. Following internship in Presbyterian Hospital, Chicago, Dr. Fox began the practice of medicine in Madison in 1893.

For many years, Dr. Fox served on the staffs of Madison General and St. Mary's Hospitals.

He was a member of the Dane County Medical Society, the State Medical Society, and the American Medical Association. He was also a member of the American College of Surgeons.

Survivors are his widow, three daughters and one son.

Dr. W. J. Pearce, Dodgeville, died suddenly at his home.

Dr. Pearce was born in Dodgeville, June 20, 1857. In the year 1875 he enrolled in the University of Wisconsin and later entered Rush Medical College from which he graduated in 1881. He first practiced in Linden and a year later moved to Cobb. In February of 1886, Dr. Pearce came to Dodgeville and has since been actively engaged there.

He is survived by his widow, one son and three daughters.

Dr. M. H. Rosenheimer, Milwaukee, died of heart disease on September 29th at Rochester, Minnesota.

Born in 1885, Dr. Rosenheimer came with his parents from Slinger, Wisconsin, to Milwaukee, at the age of five. He received his medical education at Milwaukee Medical College from which he graduated in 1908. With his father, the late Dr. Meyer Rosenheimer, he founded the Rosenheimer Hospital at Milwaukee fifteen years ago.

He is survived by his widow and one son.

Dr. George Martin, Baldwin, 82, died on September 28th at his residence in Baldwin.

He was born in the year 1853 and graduated from the University of Michigan Medical School in 1874. He first practiced at Toledo, Ohio, and then moved to Baldwin. In 1917 he left there to become physician on an Indian reservation at Fort Totten, Devils Lake, N. Dak.

He is survived by one daughter, his wife having preceded him in death several years ago.

Dr. Thaddeus L. Szlapka, Milwaukee, died on September 29th following a brief illness.

He was born in the year 1891 and received his degree at the University of Pennsylvania in 1914. He came to Milwaukee after nine years on the staff of The Mayo Clinic, Rochester.

Survivors are his widow and one son.

Dr. George W. Griswold, Alma Center, died on September 17th at his home following an illness since last spring.

Dr. Griswold was born November 20, 1885. He was a graduate of Milwaukee Medical College in 1910. He practiced for a time at Melrose, later going to Alma Center. Except for a period during the World War when he served in a hospital in New Jersey, he practiced at Alma Center.

Survivors are his widow and one son.

Dr. E. S. Meers, Kenosha, 85, died at his home September 17th after a short illness.

Dr. Meers was born Dec. 30, 1849. He attended Yale University and graduated from the School of Medicine in 1875. He then practiced at Naugatuck and Waterbury, Conn., coming to Kenosha in 1889. He retired from the active practice of medicine in 1905.

He is survived by his widow and one son.

Dr. George T. Swandale, Kenosha, died on October 9th at a Kenosha hospital.

The deceased was born in Greenville, S. C., July 17, 1855. He was a graduate of Bellevue Hospital Medical College, New York, in the year 1878. Up to fifteen years ago, he had practiced in Greenville, S. C., when he came to Kenosha.

He is survived by one son and four daughters.

Dr. Roderic S. Elliott, Waupaca, died suddenly of heart disease on October 19th in Fort Francis, Ontario, Canada. Dr. Elliott was on his way to northern Canada on a moose-hunting trip with bow and arrow in company with a friend.

He was born in the year 1875 and was a graduate of Milwaukee Medical College in 1900. His first practice was at Laona where he was located until the war and during the war was stationed at base hospital No. 83 at Revigny, France. Returning to America in May, 1919, he established an office at Green Bay where he remained for four years. He then moved to Gillett and later to Milwaukee. Five years ago he came to Waupaca to establish his practice.

In the past few years, Dr. Elliott had made archery and the collection of bows and arrows his principal hobby, and this trip would have been his first moose hunt with bow and arrow.

He was a member of the Waupaca County Medical Society, the State Medical Society, and the American Medical Association.

Survivors are his widow and one daughter.

SOCIETY RECORDS

New Members

F. W. Boots, Briggsville.
J. R. Kellogg, Portage.
Russell E. Pleune, 305½ Main St., Stevens Point.
H. J. McGinnis, Theresa.
Harold Fechtner, Merrill.

R. E. Galasinski, 1026 W. Lincoln Ave., Milwaukee.
O. H. Anderson, Plum City.

Changes in Address

L. V. Bergstrom, Amery to Milltown.
E. Addington, Dresser Junction to Ellsworth.
C. C. Gascoigne, Kenosha to 116 Pleasant St., Beaver Dam.
C. M. Yoran, Statesan to Rocky Knoll Sanatorium, Plymouth.
F. E. Kosanke, Lomira to 217 Main St., Watertown.

MEDICAL ECONOMICS

WATCH FOR THIS MAN

A new check swindle on physicians and hospitals was reported during October from two Wisconsin cities.

With variations the "theme" is for a stranger to visit a physician stating that some relative is in need of an operation the next morning and that he will bring her into the hospital that night. The physician is asked to call the hospital and make the reservation. The man then visits the hospital, inquires into the room rate, and proffers a local check in an amount considerably in excess of the weekly room rate. The check is accepted, the man receives the balance of the amount in cash, and the hospital is left holding a worthless check.

A variation of the theme is for the stranger to offer the physician's secretary a down payment amounting to one-half of the face value of the check which he proffers.

THE HIGH SCHOOL DEBATES

At the request of the Wisconsin Forensic Association, large numbers of the pamphlet recently issued Wisconsin members entitled "Discussion Outline, Social Medicine and Sickness Insurance" are being distributed to debate students. All pamphlets distributed to debate students carry a special announcement on the cover to the following effect:

TO THE DEBATE STUDENT

The leaflet attached contains in outline form (1) some of the principal points involved in proposals for social medicine and sickness insurance and (2) a tentative negative debate outline for high school students.

The material in the first fourteen pages was prepared primarily for the physician. Much of it is worded in terms that are perfectly clear to the physician with a professional background but may not be entirely clear to you. It is suggested that in the preparation of your own debate that you feel perfectly free to take this leaflet to your family physician and ask him to explain and amplify upon the statements that it contains.

Some additional material is in the course of preparation and if you should like it, please drop a card to the following address:

State Medical Society of Wisconsin,
119 E. Washington Ave.,
Madison, Wis.

TO THE DEBATE COACH

Additional copies of this leaflet may be obtained in any number required by writing to the above address.

RURAL DISCUSSION GROUPS

The subject of socialized medicine is also to be discussed in a number of so-called rural discussion groups this winter. These groups are organized under University Extension guidance and have been perfected in some twenty counties. One of the five subjects for discussion this winter is "Who Shall Pay the Doctor Bills?"

The discussion group differs from the debate in that while six participate, three present various aspects of the present situation followed by three other members who present (a) an argument for the continuation of the present system; (b) and (c) two presenting other suggested lines of action.

Arrangements have been made to supply material presenting the viewpoints of scientific medicine in those counties where the subject of the costs of medical service is selected.

HELP NEEDED

Family physicians who are approached by high school students and asked for aid in preparing material for the debate on socialized medicine are asked particularly to bring to the attention of such students the personalized nature of medical service. This is one phase that underlies any proper discussion of the entire question and yet it is a phase that is extremely difficult to present in printed material. Each physician can materially aid the students who are debating this subject if he will point out from his own experience just how individual are the requirements of the sick and how essential it is that the sick man receive a very personal attention as opposed to that type of service under which the physicians would necessarily have to operate under mimeographed and printed instructions.

PRESERVATION OF RECORDS

Immediately upon the death of a member a letter to the widow goes forward from the central office of the State Society. This letter is full of counsel and advice.

This month a new paragraph is being added to these letters pointing out that liability for malpractice does not cease at the death of the physician and that suits for malpractice may be entered against the estate of a physician. Widows are counseled to preserve all these records of the physician for at least two years following the death of their husbands.

REGULATIONS—REGULATIONS—REGULATIONS

Those advocates of a system of compulsory sickness insurance or medical service at "public expense" always "soft pedal" the administrative ex-

pense involved. And it is equally true that the advocates of such systems fail to point out that with the institution of their system the physician is brought under one regulation after another.

Through the kindness of one of our members who made a trip to France this last summer we were fortunate enough to secure a copy of the regulations governing the operation of sickness insurance in France. This book is prepared in a style very similar to our statute books and incorporates the original law, the changes, decrees, resolutions, covenants, analytical tables, and like material. The French physician must be indeed a very capable man for he must not only be a physician to treat the sick, but a lawyer to find out if he is allowed to treat the sick and how he shall treat them. This book "For the Physician" fills 400 printed pages and will be reprinted in part in a future issue of our Journal.

MORE INSURANCE PROPAGANDA

Presumably by this time the President has in his hands the findings and recommendations relative to sickness insurance as made by his Committee on Economic Security. This committee has now been disbanded but the organization of another follows closely on its heels.

The President has appointed an adviser on consumers' problems and created a consumers' division. A Mr. Walton H. Hamilton is the director of this "Consumers' Cabinet," and we note with interest that Mr. Michael Davis, long a propagandist for sickness insurance and head of the Medical Division of the Julius Rosenwald Foundation, is a member of this "Cabinet," for the purpose of studying consumers' needs in the field of medicine.

The United States News of October 21, 1935, reports that costs of medical care will be one of the studies of the Cabinet. "One of the aims of the organization," says the United States News, "is said to be in the field of medical costs to the average citizen. Suggested by Mr. Hamilton was a family budget or insurance plan for paying doctors' bills.

" 'This does not mean that the doctor shall receive less,' he explained, pointing out that if families lay aside a certain amount either through a special budget or insurance for a specific purpose, the number of those who can pay their doctors' bills will be larger, and, therefore, the cost to each patient probably will be curtailed.

"Already the United States Public Health Service," says the News, "has started its house to house canvass in nineteen states (Wisconsin not as yet included) to ascertain the adequacy of health facilities, the extent to which they are used, and other information.

"Findings from this survey will be analyzed by the 'Consumers' Cabinet'."

THE MARCH OF MEDICINE

Not unlike the "March of Time" the American Medical Association each week depicts before a radio audience memorable events in the history and the practice of medicine. On Tuesday afternoon of each week at 4:00 o'clock P. M. (central standard time) the A.M.A. over the National Broadcasting Company's network presents dramatized radio programs on medicine and health. They are excellently prepared programs and should be commended to the patients of every Wisconsin physician. Among stations that use these broadcasts are WENR, Chicago; WIBA, Madison; KSTP, St. Paul; WEBC, Duluth and Superior; KDKA, Pittsburgh, and WJZ, New York.

"THE SIMPLE TRUTH"

High School students in Wisconsin who are called upon to debate the question of socialized medicine are being swamped by simple statements and will be given to understand that the propagandists are discussing "the simple truth."

The student of the public health appreciates keenly in connection with his studies that often-quoted statement of Thomas B. Reed: "People will tell you that truth is simple,—half-truths are simple. The whole truth is the most complicated thing in God's universe."

STATUTE OF LIMITATIONS SUSPENDED

Do you know that if your patient leaves the state after treatment and without paying for your services, the six year statute of limitations does not outlaw the account during his absence? Mere absence itself is not sufficient, but a settled residence out of the state is necessary. See Sec. 330.30 of the Wisconsin Statutes. If your cause of action is against a non-resident, he is not entitled to the benefits of the Wisconsin statute of limitations whatever, unless he moves into the state, at which time the statute begins to run.

NATUROPATHS IN ARIZONA

Despite the fact that a referendum election on the licensing of naturopaths failed in Arizona last fall, the Legislature of that state this winter not only passed a naturopathic licensing act but also exempted naturopaths from requirements of the Arizona Basic Science Act. It is understood that a court question on constitutionality of the law will be presented, but in the meantime it is interesting to note that Arizona chiropractors are already taking advantage of a "grandfather clause" and becoming naturopaths. Obviously the purpose is so that they may extend their practice into newer and more profitable fields.

Perhaps that explains why the Wisconsin naturopathic bill defeated in the Assembly, was advanced almost entirely by men who already hold chiropractic licenses in Wisconsin.

MALPRACTICE SUITS

Data on 35,000 suits, furnished by various physicians and liability companies, was analyzed by Drs. H. G. Stetson and J. E. Moran of Greenfield, Mass., and their findings published in the New England

Journal of Medicine. The causes of these suits, as determined by their analysis, were, in the order of importance:

1. Inopportune remarks by subsequent attending physicians.
2. Personal enmity and jealousy between members of the profession.
3. Counter suits interposed as a defense against the suit brought by a doctor for the purpose of collecting his fee.
4. Failure to use the x-ray in the diagnosis and reduction of fractures.
5. Outide causes, such as newspaper articles.
6. Negligence of the nurse employed by the physician.
7. Alcoholism.
8. Failure to use a method of treatment which is used by the majority or a respectable minority.

Sixty per cent of the 35,000 suits resulted from inopportune remarks of brother physicians, or to personal grudges; therefore, all of us should use discretion when making remarks concerning the handling of a case. A good question to ask yourself is: Am I fully informed as to all circumstances connected with this case; a good thought is the commandment: "Neither shalt thou bear false witness against thy neighbor."

—*Journal of the Medical Association of Georgia, July, 1935.*

Early Efforts of the Wisconsin State Medical Society to Legalize Dissection

By WILLIAM SNOW MILLER, M. D.
Madison

UNDER the Laws of the Territory of Wisconsin, passed in 1841, *The Medical Society of the Territory of Wisconsin* was authorized to meet at Madison the second Monday in January, 1842. A majority of the incorporators, who were Bushnell B. Cary, M. C. Darling, Lucius T. Barber, J. C. Mills, David Walker, Horace White, J. P. Russell, David Ward, Jesse S. Hewitt, and B. O. Miller, met at the proper time and completed the organization of the society. Unfortunately all the records of the society prior to 1847 have been lost. In 1848 Wisconsin became a State, and the name of the society was changed to *The Medical Society of the State of Wisconsin.*

Early in the history of the society, medical education and means by which legal dissection of the dead could be accomplished occupied the attention of the society. At the meeting of the society held at Madison, January 16, 1850, "Dr. A. L. Castleman, was appointed to confer with the Regents of the Wisconsin University, who are now in session, on the subject of organizing the Medical Department of that Institution." The outcome of the conference will be taken up in a later communication dealing with Medical Schools in Wisconsin. It is introduced here because an anatomical department, in which dissection is carried on, forms an essential part of a medical school.

At a Mass Medical Convention held at Madison, January 15, 1851, the following "bill providing for the prosecution of dissections and inquiries intended for adoption by the legislature," was introduced by Dr. G. D. Wilber.

FORM OF BILL PROVIDING FOR THE PROSECUTION OF ANATOMICAL SCIENCE, ETC.*

A Bill to legalize the study of anatomical and surgical science and to provide for the prosecution of the same.

Whereas the statutes of the State of Wisconsin at present exhibit the anomaly of placing a heavy penalty on ignorance in anatomical and surgical knowledge, and on the only means of obviating that ignorance and improving in such knowledge; therefore in order to remove the impediments now existing to obtaining a thorough knowledge of anatomical and surgical science within this state.

The People of the State of Wisconsin, represented in Senate and Assembly, do enact as follows; viz.

Section I. That it shall be lawful from and after the passage of the Bill, for either the board of health, any one of the Supervisors, any Justice of the Peace, Mayor or Alderman of any county, town, city or village in this state to deliver or surrender the dead body or bodies of such person or persons as may be required to be buried at the public expense, to any regularly educated physician or person

* This bill does not appear in the published transactions. It was obtained from the Secretary's report of the meeting.

under his direction on his application for such body or bodies, to be used by said physician or his agent for the advancement of anatomical and surgical science, preference being in all cases given to the medical schools that now are, or may hereafter be established by law in the state: *Provided always* that no such dead body shall be so surrendered, if within thirty-six hours from the time of its death, any one or more persons claiming to be kin or friend of the deceased shall require said body to be inhumed at his or their own expense, or if it be made to appear to the persons aforesaid empowered to surrender such bodies that such dead body is the remains of a stranger or traveler who suddenly died without making known who he was or from whence he came, but such dead body shall be respectably inhumed: and *Provided further*, that every physician so receiving any such dead body shall in each case give to the persons surrendering such body good and sufficient bond that each body so received by him shall be used only for the promotion of anatomical and surgical science, that it shall be used for that purpose only in this state, and in a manner not to outrage or injure the public feelings, and that after having been thus used the remains thereof shall be decently interred by the person so using them.

Section II. That from and after the passage of this bill it shall be lawful for any physician having the degree of Doctor of Medicine or any Medical student or person under the authority of any such physician to have in his possession to use and employ human dead subjects or any of the parts thereof for the purposes of anatomical and scientific enquiry and instruction.

Section III. That section (17) seventeen of chapter (139) one hundred and thirty-nine of the Revised Statutes of Wisconsin be and continue in full force, except in so far as it may contravene the provisions of this bill.

On motion the bill was laid on the table, "it being the opinion of several of the committee that action on matters foreign to the great object of our meeting [the incorporation of the Wisconsin State Medical Society] would tend to retard or frustrate that object."

Section 17, Chapter 139 of the Revised Statutes, 1849, reads as follows:

If any person not being lawfully authorized, shall willfully dig up, disinter, remove or convey any human body, or the remains thereof, or shall knowingly aid in such disinterment, removal or conveying away, every such offender, and every person accessory thereto, either before or after the fact, shall be punished by imprisonment in the state prison not more than two years nor less than six months, or by fine not exceeding two hundred dollars.

Section 17 of Chapter 139 of the Revised Statutes, 1849, is also found on page 367, paragraph 16, of the 1839 Statutes. It is interesting to find a law against "resurrecting" thus early in Wisconsin. One wonders whether the published report of the experience London and Edinburgh had had with the resurrectionists, who supplied the medical schools with dissection material, had reached Wisconsin and prompted the law.

It is true that serious disturbances had occurred in Boston, Philadelphia, and New York due to the robbing of graves; but, so far as I can ascertain, nothing of the kind had happened in Wisconsin.

No meeting was held in 1852 and 1853 due to the lack of a quorum. The meeting held in Madison January 25, 1854, was an important one. Reorganization of the society was accomplished and a Constitution adopted in which the society is officially designated *The Wisconsin State Medical Society,* the third and final name of the society.

The annual meeting of *the Wisconsin State Medical Society* was held at Madison January 31, 1855. At the morning session, the second day of the meeting, "Drs. Wood, Cary, and Magoffin were constituted a committee to take into consideration that portion of the Secretary's report suggesting the propriety of trying to get a bill enacted by the Legislature providing for the prosecution of anatomical and surgical science and legalizing the same, with instructions to report as soon as practicable." The committee made a report at the afternoon session which was accepted and adopted, and the committee was discharged. The text of the bill is as follows.

AN ACT ENTITLED AN ACT TO LEGALIZE THE STUDY OF ANATOMICAL AND SURGICAL SCIENCE

The people of the State of Wisconsin, in Senate and Assembly represented, do enact as follows:

Section I. It shall be lawful, from and after the passage of this Act, for the Supervisors of any town or county, or the Aldermen or Board of Health of any incorporated city or village in this State, or any of them, to deliver to any regularly educated and well-known physician, or person under his direction, on his application for the same, the dead body or bodies of such person or persons as may be required to be buried at the public expense; said body or bodies to be used by said physician or his agent for the advancement of Anatomical and Surgical science, preference being in all cases given to the med-

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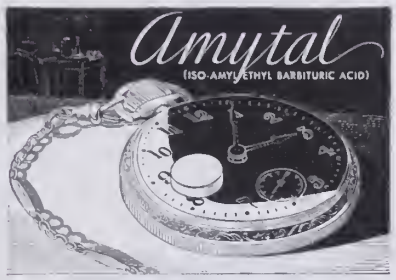

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ical schools that are now or may hereafter be established by law in this State, and to such persons as are or may be engaged in instructing in medical science; *Provided* that such remains shall not have been regularly interred, and shall not have been desired for interment by any relative or friend of said deceased person within twenty-four hours after death; *Provided*, also, that the remains of no person who may be known to have relatives or friends, shall be delivered or received without the consent of said relatives or friends; and *Provided* that the remains of no traveler who died suddenly, without having an opportunity to make known who he was and from whence he came, nor of any person who shall have expressed a desire in his or her last illness that his or her body may be interred, shall be delivered or received as aforesaid, but shall be buried in the usual manner; and *Provided*, also, that in case the remains of any person so delivered or received, shall be subsequently claimed by any surviving relative or friend, they shall be given up to said relative or friend for interment. And it shall be the duty of the said physician thus receiving said bodies as aforesaid, decently to bury in some cemetery the remains of all bodies after they shall have answered the purpose of study aforesaid; and for any neglect of this provision of this Act, the party so neglecting shall forfeit and pay a penalty of not less than twenty-five (25) nor more than fifty (50) dollars, to be sued for and recovered by the health officers of said city, or village, or town, for the benefit of their department.

Section II. Every person who shall deliver up the remains of any deceased person in violation of, or contrary to any or all of the provisions contained in the first section of this Act, and any person who shall receive said remains, knowing the same to have been delivered contrary to any of the provisions of said section, shall each and every of them be deemed guilty of a misdemeanor.

Section III. All former laws, so far as inconsistent with this Act, are hereby repealed.

This bill was passed by the Legislature at its 1855 session; but failing to receive the signature of Governor Barstow, it was thereby defeated.

Not discouraged by the failure of the Governor to sign the 1855 bill to legalize dissection, the Society, at the annual meeting held at Madison January 30, 1856, again voted "that the bill legalizing the study of Anatomy, as prepared last year, be again presented to the Legislature for their (adoption) action." Drs. D. D. Cameron, Mills, Ward, Wilber, and Gray were appointed a committee to present the bill to the Legislature.

At the annual meeting of the Society held at Madison January 28, 1857, under "unfinished business" the following item appears: "that the Society ask the Legislature to pass a law legalizing the acquisition of subjects to facilitate the study of Anatomy and Surgery." The report of the committee to whom the list of items was referred was accepted and adopted without discussion.

The annual meetings in 1858 and 1859 were small and nothing of interest or importance was transacted. In 1860 and 1861, the attendance was better, but it was evident that the Society was not receiving the support of the medical profession which its active members desired.

Fort Sumter was fired upon in 1861, and the war between the states began. This occupied the attention of the Nation for the succeeding years and drew heavily on the medical profession. When peace was established, restoration of the meetings of *The Wisconsin State Medical Society* seemed desirable to surviving members. The President had removed to Minnesota. Accordingly the Vice President, Dr. H. A. Youmans, issued a call for a special meeting to be held at Janesville, July 23, 1867, for the purpose of reorganizing the Society. Nine former members of the Society were present; the membership was increased when, the Censors having passed favorably on their credentials, twenty-eight applicants were admitted to membership.

The previous effort of the Society to legalize dissection was not forgotten; among the items reported by the business committee and adopted by the Society was the following: "That an effort be made to have dissection of human bodies legalized by State enactment."

At the regular meeting of the Society held at Madison January 29, 1868. Dr. R. B. Treat of Janesville offered the following resolution, which was adopted:

Resolved, That a committee of five be appointed by the chair to take such measures as they may deem necessary, to procure the enactment of such law or laws as may be proper to protect physicians in procuring human bodies from proper sources for dissection—in other words, to legalize dissections.

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The frequent incidence of the gas-producing bacilli, B. perfringens (B. Welchii) and B. Vibrion septique, in anaerobic infections makes it advisable to protect against both of these organisms, as well as against B. tetani. Clinical evidence indicates that the remaining anaerobic organisms are a much less frequent cause of infection.

The physician desires no compromise with safety. Protection against these three potential factors in anaerobic infections is afforded by Tetanus Gas-Gangrene Antitoxin (Combined), Refined and Concentrated, P. D. & Co.

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The chair appointed, as such committee, Drs. Treat, Manley, Ayers, Davies, and Benson.

The annual meeting of *The Wisconsin State Medical Society* for the year 1869 was held at Madison, June 16. No report was made by the committee on measures to legalize dissection.

In 1870 the annual meeting of the Society was held in Milwaukee, June 15. The committee on legalizing dissection presented the following report which, on motion, was adopted:

REPORT OF THE COMMITTEE ON LEGALIZING DISSECTIONS

At the session of *The Wisconsin State Medical Society*, held at Madison, Jan. 30, 1868, the undersigned were appointed a committee to procure the enactment of such a law or laws as might be proper to protect physicians in procuring human bodies from proper sources for dissection—in other words, to legalize dissections.

Your committee immediately conferred with the Assembly Committee on Medical Societies, consisting of Messrs. Manley, Davies, Ayers, Benson, and Kuffler, who reported a bill which was passed and approved Feb. 29, 1868, entitled, "An Act to Legalize Dissections," published on page 52 of the General Laws of 1868.

Your committee recommend that the said Act be published in the next transactions of the Society.

Respectfully,

R. B. Treat,
Chairman Committee,
J. Manley,
D. C. Ayers,
D. C. Davies,
L. M. Benson.

The following is a copy of the law referred to:

An Act to Legalize Dissections—*The People of the State of Wisconsin, represented in Senate and Assembly, do enact as follows:*

Section 1. It shall be the duty of each and every public officer having the charge of dead bodies, such as are required to be buried at the public expense, to deliver to any member or agent of a county or state medical society, each and every dead body of persons dying under his charge, unless within forty-eight hours after death of such person or persons, the friends or relatives shall claim the same for interment.

Section 2. It shall be the duty of each and every such officer, having in charge the dead body of such person, to notify the friends or relatives of the deceased of the death of such person, and in no event to deliver the same to the surgeon until they are so notified, and express a willingness that the body shall be so disposed of.

Section 3. It shall be the duty of each and every such officer, after complying with the provisions of section two of this act, to deliver each and every dead body under his charge to the surgeon, first complying with the provisions of section one of this act, if such officer is personally satisfied that the dead body so delivered shall be used only for the advancement and promotion of anatomical science within this State.

Section 4. This act shall take effect and be in force from and after its passage and publication.

Approved Feb. 29, 1868.

This ended the struggle by *The Wisconsin State Medical Society* to legalize dissection in Wisconsin. How many physicians availed themselves of the opportunity, thus granted them, to improve their knowledge of anatomy, or perfect their surgical technique, I have no means of knowing. Only isolated instances have come to my attention.

Instructions Issued for Submitting Bills to U. S. Employees' Compensation Commission

WHILE all physicians were notified through the office of the State Medical Society some weeks ago that they should use voucher form S–69 in submitting claims for medical services under the U. S. Employees' Compensation Commission, more definite instructions were issued by the Commission during October. The new instructions follow:

INSTRUCTIONS TO PAYEE

1. Attach authorization for treatment or examination (Special Form CA–16 or CA–17) if it has not already been forwarded to the Commission.

2. **An Unitemized Bill Cannot Be Paid.** The account must be stated in sufficient detail to show clearly the service rendered. The date of each treatment, including year and date and the charge therefore, is required.

3. Medicine and drugs supplied from the physician's own stock may be allowed *only* when such

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item bears the notation "Supplied from stock." If not supplied from physician's own stock, a receipt therefore is required, otherwise item will be disregarded.

4. **Do Not Include Charges for Services Rendered by Others** unless the person rendering such services was a salaried employee in your employ. Claim for payment for services rendered by others than your salaried employee must be made on a separate voucher by the person who rendered such services. If you have paid another person for services rendered on your order, the amount so paid may be included in your voucher if accompanied by an itemized bill properly receipted.

5. Signature of injured employee must be affixed to voucher. If signature is by mark, it must be witnessed by a person other than payee and must bear full signature and address of witnesses. If signature of employee cannot be obtained, explain why.

6. Special information required:
   (a) X-rays—Date of x-ray, number of views and parts of body x-rayed. X-ray negatives should not be sent to the Commission unless specifically requested by the Commission.
   (b) Hospitals—Allowance will be made for the day of admission but *not* for the day of discharge. The per diem rate includes: General medical and surgical care by the house staff, ordinary nursing, usual medicines, dressings and supplies, routine laboratory tests, and material for plaster casts.
   (c) Bills for hospital service, nurses, consultants, x-rays, anaesthetic, medicine, appliances, physiotherapy, drugs, etc., must be approved by the physician in charge.

7. All vouchers must be endorsed by the local compensation officer or in case of Federal establishments the official superior of the injured employee. (See sample voucher below.)

SAMPLE VOUCHER

The United States, Dr., To Richard M. Roe, M. D.
210 Medical Bldg., Chicago, Ill.

Date or period of treatment	Name of employee and nature of injury	Character of services or supplies	Quantity or Number	Unit price Cost per	Amount Dollars	Amount Cts.
Sept. 1–5 1935	John Doe Forest Service	Suture				
		sound 9-1-35	1	3.00	3	00
	Laceration palm	Dressing 9-2-35	1	1.00	1	00
	rt. hand	Dressing 9-5-35	1	1.00	1	00
I certify that the services covered by this voucher were rendered as claimed. Frank Brown ---------- State your title here						
				Total	5	00

I certify that the above bill is correct, etc.

Richard M. Roe
Payee ---------- Per----------
Title----------

CERTIFICATE OF INJURED EMPLOYEE

I certify that the above-mentioned services and/or supplies were received by me, etc.

John Doe
(Sign Original only)----------
Signature

Wisconsin Members Invited to Attend Scientific Program at St. Paul in Connection With Wisconsin-Minnesota Game

The medical profession of St. Paul through its organization, the Ramsey County Medical Society, has arranged a special scientific session Friday evening, November 22nd, and Saturday morning November 23rd, preceding the Wisconsin–Minnesota football game Saturday, November 23rd.

The doctors of Wisconsin are cordially invited to attend this session. The program will be given in

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the auditorium of the Ramsey County Medical Society located in the Lowry Medical Arts Building. This auditorium is favorably located in respect to the leading St. Paul hotels.

On Friday evening, November 22nd, the subject of "Right Side Abdominal Pain" will be discussed. Surgical aspects will be presented by Dr. Arnold Schwyzer of St. Paul and medical aspects by Dr. Joseph Borg of St. Paul. A general discussion will follow after which a buffet luncheon will be served. On Saturday morning, November 23rd, Dr. John F. Noble, pathologist of Ancker Hospital, will lead the clinical pathological conference.

Dr. J. C. Hultkrans, fifteenth floor, Medical Arts Building, St. Paul, is Secretary of the Society and offers to make hotel reservations for any Wisconsin physicians desiring to attend the program and the game.

Getting Sanatorium Care

By WISCONSIN SANATORIUM SUPERINTENDENTS' ASSOCIATION

Cava Wilson, Secretary, Winnebago

SO MANY requests have come from Wisconsin physicians for information on procedures necessary to place a tuberculous patient in a sanatorium that we have prepared this summary of steps necessary to secure sanatorium admission.

First is the diagnosis of the disease by a regularly licensed physician. If he advises sanatorium care he must sign a certificate that the patient is afflicted with tuberculosis, or that he presents symptoms requiring observation to complete the diagnosis. (Blank certificates are furnished by the sanatoria).

The physician, the patient, or someone for him, should communicate with the selected sanatorium (the nearest one probably first) to see if the patient can be admitted—that is, whether he is eligible and whether there is room. If the patient is able to pay for his care he may be sent with no further formalities.

Second, if the patient has to apply for care at public charge—either in whole or in part—the desired sanatorium should be advised of that fact as the following blanks must be sent to make application to the County Judge, viz.:

(1) Application of patient for admission at public charge.

(2) Letter of Superintendent to County Judge that applicant is eligible and can be received (not used by all sanatoria).

(3) Certificates of physician that applicant has tuberculosis.

(4) Certification of County Judge to sanatorium superintendent approving application as a public charge patient.

Application for care at public charge must then be filed with the County Judge of the patient's county legal settlement. Such application should be accompanied by the certificate of the physician, the superintendent's letter and the blank form for the Judge's approval. The County Judge, after a hearing, passes on the question of legal settlement and patient's ability to pay, and if facts warrant, approves the application for public care. The Judge's approval of patient's application as a public charge patient is sent to the sanatorium and on receipt of same the patient will be admitted as a public charge patient.

In order to assist in the placing of tuberculous patients the Wisconsin Anti-Tuberculosis Association receives weekly reports from the sanatoria covering current vacancies. A summary of these reports is sent each week to all placement officials, i.e., sanatorium superintendents, county judges, public health nurses and officers.

In addition, the Wisconsin Anti-Tuberculosis Association maintains a Social Service Department. One of its functions is to assist in the placement of problem cases, such as those where the legal settlement is in doubt, or those from a locality which has no available vacant beds. If you need help in getting your patient placed, call or write the Wisconsin Anti-Tuberculosis Social Service Department, 1018 North Jefferson Street, Milwaukee, Wisconsin, which will gladly assist you.

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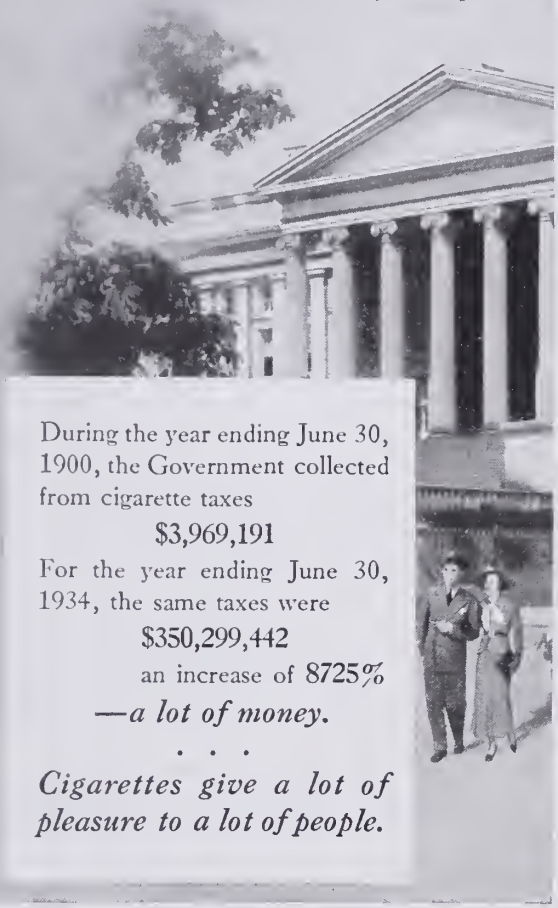

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THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

Individual Exercises. By George T. Stafford, M.S., director corrective physical education, University of Illinois; Harry B. DeCook, M.A., director corrective physical education, Northwestern University; Joseph L. Picard, M.S., director corrective physical education, University of Arizona. Price $1.00. A. S. Barnes & Co., New York, N. Y.

Personal and Community Health. By Clair E. Turner, M.A., Dr.P.H., professor of biology and public health in the Massachusetts Institute of Technology. 4th edition. Price $3.00. C. V. Mosby Co., St. Louis.

The Treatment of Diabetes Mellitus. By Elliott P. Joslin, M.D., medical director, George F. Baker Clinic, New England Deaconess Hospital; clinical professor of medicine, Harvard Medical School. Fifth edition, revised and rewritten. Price $6.00 Lea & Febiger, Philadelphia.

Pediatric Treatment. By Philip S. Potter, A.B., M.D., formerly instructor in clinical pediatrics at the Medical School of Syracuse University; chief of the pediatric service of the University Hospital of the Good Shepherd. Price $5.00. The Macmillan Co., 60 Fifth Ave., New York, N. Y.

A Textbook of Bacteriology. By Thurman B. Rice, A.M., M.D., professor of bacteriology and public health at the Indiana University School of Medicine. Cloth $5.00 net. W. B. Saunders Co., Philadelphia.

Diseases of the Nose and Throat. By Charles J. Imperatori, M.D., professor of clinical otolaryngology, New York Postgraduate Medical School, Columbia University, New York, and Herman J. Burman, M.D., instructor of clinical otolaryngology, New York Postgraduate Medical School, Columbia University, New York. J. B. Lippincott Co., Philadelphia.

The Pathology of Internal Diseases. By William Boyd, M.D., professor of pathology in the University of Manitoba; pathologist to the Winnepeg General Hospital, Winnepeg, Canada. Second edition, thoroughly revised. Lea & Febiger, Philadelphia. Price $10.00.

The Stomach and Duodenum. By George B. Eusterman, M.D., head of section in Division of Medicine, The Mayo Clinic, and Donald C. Balfour, M.B., M.D., head of section in Division of Surgery, The Mayo Clinic, professor of surgery, The Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota. Cloth $10.00 net. W. B. Saunders Co., Philadelphia.

A Textbook of Physiology. By William D. Zoethout, Ph.D., professor of physiology in the Chicago College of Dental Surgery (Loyola University). Fifth edition. Price $4.00. C. V. Mosby Co., St. Louis.

Practical Clinical Psychiatry for Students and Practitioners. By Edward A. Strecker, M.D., professor of psychiatry and chairman of the department of psychiatry, School of Medicine, University of Pennsylvania, and Franklin G. Ebaugh, M.D., professor of psychiatry, University of Colorado Medical School. Fourth edition. B. Blakiston's Son & Co., Inc., 1012 Walnut St., Philadelphia, Pa.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

The Pneumonokonioses (Silicosis). Literature and Laws of 1934. By George G. Davis, M. D., Associate Clinical professor of surgery, Rush Medical College, University of Chicago, attending surgeon Cook County Hospital. Chicago Medical Press, Canal & Jackson Bldg., Chicago, Ill.

A year ago Dr. Davis and his collaborators published Book I which listed, with few exceptions, all the references to pneumonokonioses from 1556 to 1933 inclusive.

The present volume (Book II) furnishes a review of the literature and laws of 1934. Whereas Book I merely cited references, the present work furnishes an abstract of each article. The work is complete. There is a total of 396 references. In addition, the bibliography, not included in Book I, is included. There are good subject and author indexes.

This volume together with Book I will be very valuable to workers in this field. The extensive literature of but one year is indicative of the wide and increasing interest that this subject holds. Compilation of this book has been a worthwhile project. O.O.M.

Clinical Diagnosis by Laboratory Methods. Eighth edition. By James C. Todd, Ph. B., M. D., late professor of clinical pathology, University of Colorado, School of Medicine; and Arthur H. Sanford, A. M., M. D., professor of clinical pathology, University of Minnesota (The Mayo Foundation). Thoroughly revised. Cloth $6.00 net. W. B. Saunders Co., Philadelphia.

This always welcome book has now been current for 25 years and has reached its eighth edition. Many new tests have been added, bringing it completely up-to-date. There are also changes in arrangement which appear advantageous to the reviewer.

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The most extensive revision appears to be in the chapter on hematology where progress has been particularly rapid in recent years. Among the more important additions in this chapter are filament-nonfilament counts, Sabin's vital staining technic, Isaac's refractile granule, Van Allen's "thrombocytocret" and a description of Nygaard's method for making the plasma platelet count. A new and simpler classification of the anemias, and a discussion of the M & N agglutinogens are also worthy of mention.

A new chapter on clinical chemistry has been added, with tests for determining sulphemaglobin, uric acid, amino acid nitrogen, cysteine and cystein, serum protein, albumin-globulin ratio, etc.

The chapters on the examination of feces, on serology, and on bacteriology also show careful revision.

The discussions of the significance of the tests, always a feature of this book, also shows careful revision. The diagrams and illustrations are well chosen.

In spite of the additions there has been little increase in size.

This book is highly recommended. Its usefulness to the practicing physician, to the medical student and to the laboratory technician is self-evident. It should enjoy an even greater success than the preceding editions. W. D. S.

The Physiology of Physical Education. By Percy M. Dawson, M.D., formerly professor at the Johns Hopkins University and at the University of Wisconsin. The Williams & Wilkins Co., Baltimore. Price $8.00.

Dawson considers physical education a valuable adjunct to measures advocated for the prevention of disease and the improvement of physical fitness. He has written a textbook dealing not only with fundamental principles and the physiology of muscular activity, but with physiology applied in a broad and comprehensive way to the problems confronting the individual charged with the administration and supervision of industrial work and exercise. It is the most complete of the five or six recent texts in this field written in the English language. The book contains 956 pages and 135 simple, clear, diagrammatic illustrations. It is divided into 14 parts and contains 42 chapters. The sections dealing with casualties of sport and work, tests of fitness, types of exercise and their calibration, and the physiological consequences of muscular activity will be of special interest to the physician. The chapters on depleted organs, cardiac fatigue, the negative phase, and ergogenic changes in the blood are likewise of practical value. Much hitherto widely scattered useful information is made available.

The book contains two unusual features. First, the adaptation of simplified spelling and the free use of abbreviations for both scientific and non-technical terms. Second, it is addressed directly to the student in a personal way and contains, under the term Scientific Humanism, ideas and material unrelated to the study of physiology. The book is poorly documented and the bibliography is incomplete and unwieldy in that it must be used in conjunction with reference lists published in two other textbooks on the physiology of exercise. F.A.H.

Food and Beverage Analysis. By Milton Arlanden Bridges, B. S., M. D., director of medicine, Department of Correction Hospitals, New York; consulting physician, Seaview Hospital, Staten Island, New York. Price $3.50. Lea & Febiger, Philadelphia, 1935.

The following quotation from the publishers' announcement of the book is a fair and informative explanation of the contents of this book:

"This book is unique in the multiplicity of food analyses it contains covering nutritive, mineral and vitamin values and alcoholic analyses. The data, bibliographic and analytical, is as late as of July, 1935, and the bibliography is the most complete of its kind that has ever appeared. The tabular material, is the largest, most accurate and most complete available. The analyses have been checked and rechecked and whenever a question of validity has arisen, independent analyses have been made. Each food item presents not only the percentage composition of the nutritive elements, but also the number of grams of each element in each portion of a specific food. The average household portion is stipulated in common measures.

"The ever increasing use by the public of canned and packaged food has created a need for dietetic recognition of these products, the analyses of which have been available only through contact with the manufacturers. It is both impractical and archaic for the physician and dietitian to insist solely upon fresh and non-commercial products, but in order to prescribe a proper diet it is necessary that the analyses of proprietary brands should be available. This volume is offered to meet this requirement. The material herein presented is the result of the intensive efforts of a large staff of assistants and other investigators who have thoroughly searched international records in order to correlate and evaluate the available data. Where such data on common foods is lacking, original analyses have been made and the results have been embodied. This work, therefore, fills an hiatus in the armamentarium of interested nutrition.

"This book should find a place in every hospital library and in every diet kitchen, as a text-book for all students of nutrition and home economics, and as an essential consultant text in every dietetic school."

It is indeed one of the most important contributions to the readily available data on food values which has appeared since Government Bulletin No. 28 many years ago. The one criticism worth mentioning is that the source of information for any given analysis is not mentioned. The reasons are probably that this would necessitate adding to the size of the book and complicate it without adding greatly to its helpfulness for routine use.

The book is, therefore, highly recommended. E. L. S.

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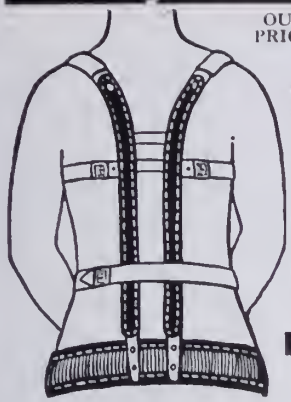

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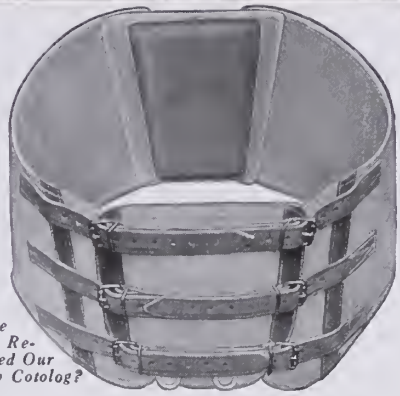
Ambulatory Splint .. 15.00
Cervical Neck Brace 20.00



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Human Pathology. By Howard T. Karsner, M.D., professor of pathology, Western Reserve University, Cleveland, Ohio, Fourth Edition, revised, 1935, J. B. Lippincott Co., Philadelphia, Pa.

The fairly extensive bibliography makes this well-known text a very useful guide to the outstanding contributions to modern pathology. Some changes have been made, notably in the sections on tumors, the nervous system and the endocrine glands. The style is a little difficult, however, and one gains for the most part the impression of an attempt at covering a large amount of ground superficially rather than setting forth the fundamental pathological processes in a thorough manner. G.R.

The Doctor and the Public. By James Peter Warbasse, M. D., Author of "Surgical Treatment", "The Conquest of Disease", "Medical Sociology", "Cooperative Democracy", etc. Illustrated. Paul B. Hoeber, Inc., New York, N. Y. Price $5.00.

Doctor Warbasse's purpose in this book is to develop for the lay public the history of medicine and then to evaluate the relation between the doctor and the public. He aims to increase the knowledge of medicine generally and thereby be helpful in increasing the services which modern medicine has to offer. He begins with a prehistoric preamble and then records the history of medicine in much the same manner as has been done previously by other historical writers who have written for both the general and the medical public. He emphasizes, especially, modern social trends with their effects upon the changing practice of medicine.

His own philosophical and sociological interpretation of facts permeate the entire book. Inasmuch as his ideas must be looked upon as being individual and not representative of those of the profession at large, it is unlikely that his purpose will in any measure be realized. It seems unfortunate that the facts of medical history should be combined with a false philosophy. He fails, for example, to reconcile his own idea of the spontaneous origin of life on the one hand with the statement that Pasteur "has finally put to rest the theory of spontaneous generation of organized cellular form." His philosophy throughout is mechanistic. To him, religion and superstition are synonymous, while all things are capable of explanation in terms of physical-chemical action and reaction. Truth, with him, is changeable. Man differs only from animals because of his different hereditary background and instinct. Tendencies of hereditary origins and impressions received through his senses cause a physical-chemical action in his cells that directs him in his activity. If medicine were properly understood and applied, a medical board would replace the legal profession, for, "The individual who does a cruel, unjust, or unsocial act usually is either mentally defective or mentally sick, or he is the victim of social injustice."

Instead of the court, a consultation board should be established. The court would become a diagnostic institute, with diagnosticians instead of judges. Diagnosticians would be of two classes. One, the physician, the psychologist, and the alienist; and two, the sociologist, the economist and the educators. If it were not for such ideas as those enumerated above, the book could be recommended as a well written, easily-read history of medicine. K.L.P.

Living Along With Heart Disease. By Louis Levin, M.D., cardiologist to the St. Francis Hospital and New Jersey State Prison Hospital, Trenton, N. J. Price $1.50. The Macmillan Co., 60 Fifth Ave., New York, N. Y.

This small compact volume of 126 pages has been written primarily for the cardiac patient, with the express intention of giving him a clearer understanding of the subject of heart disease in general and instilling in him a spirit of hope and optimism. The book is so interestingly written and the information which it contains concerning the etiology, treatment and prognosis of the more prevalent types of heart disease is so accurate and up-to-date, that it will undoubtedly win the complete approbation of the casual reader. However, in the opinion of the reviewer, the writing of such books for indiscriminate distribution among the laity should be discouraged. The individual patient reading a book dealing with a subject as broad as that of heart disease in its various aspects and phases can hardly be expected to accurately select the one or two paragraphs directly applicable to his own case and ignore the remainder, with the result that he is more harmed than benefited.

As an illustration of one of the heart conditions in which optimism is not warranted, the author paints a very graphic and pathetic picture of a typical case of subacute bacterial endocarditis, describing the early stages in which the patient appears relatively well, and the gradual but steady downhill course resulting in the almost inevitable termination after a period of months in spite of all medical science can offer. The description is so vivid that a patient suffering from this condition could hardly fail to recognize it as the malady with which he was afflicted, and it does not require a great deal of imagination to visualize the tremendous difficulty which would be encountered by the attending physician in the future conduct of the case.

The advisability of encouraging a high degree of optimism in all cardiac patients is decidedly open to question. In the experience of the reviewer a large percentage of cardiac patients have a natural tendency to over-optimism and are with difficulty restrained within the limits of their myocardial reserve. This book would only increase the problem for the medical adviser in such cases.

The author is inconsistent in that he repeatedly stresses the need for close cooperation between the patient and the physician and the necessity of highly individualized treatment, and at the same time offers the cardiac patient a treatise which deals with numerous aspects of all the common types of heart disease. It appears to the reviewer that the underlying principles and purposes of a book of this type

PHYSICIANS' EXCHANGE

Advertisements for this column must be received by the 25th of the month preceding month of issue. A charge is made of $2.00 for the first appearance of copy occupying 1 inch or less of space and $1.00 for each succeeding insertion of the same copy. Kindly accompany copy with remittance to cover number of insertions desired. Advertisements from members of the State Medical Society will be accepted without charge. Such copy will be taken out after its second publication unless otherwise requested. Where numbers follow advertisements replies should be addressed care Wisconsin Medical Journal.

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are entirely illogical. The only one really competent to transmit this sort of information is the patient's own physician who not only knows the heart condition but also his patient's mental and emotional make-up.

It is the members of the medical profession who are most greatly in need of a more optimistic attitude toward heart disease and if this book were intended primarily for the physician it would receive the reviewer's hearty approval, but as a book to be placed indiscriminately in the hands of individuals suffering from various types of heart disease, it is apt to do more harm than good. C. M. K.

Diseases of The Liver. By Samuel Weiss, M. D., clinical professor of gastroenterology, N. Y. Polyclinic Medical School and Hospital; attending gastroenterologist, Jewish Memorial and Beth David Hospitals, New York. Price $10.00. Paul B. Hoeber, Inc., New York, New York.

This is an extremely practical volume dealing with the everyday problems in biliary and pancreatic disease. The author has given much of his valuable experiences obtained in private practice and in the hospital wards. It is a well-balanced volume thoroughly fortified by a voluminous bibliography. A most valuable guide for the practitioner, a good text for the student, and an excellent reference book for the research worker. J. W. G.

Diseases of the Thyroid Gland. By Arthur E. Hertzler, M. D., chief surgeon, Halstead Hospital; professor of surgery, University of Kansas. Third edition, entirely rewritten. C. V. Mosby Co., St. Louis, Mo. Price $7.50.

This volume of 348 pages is not a text book for students, but is a very interesting presentation of the points of view of the author, about thyroid diseases. It serves to present his classification of goiters which has questionable advantages over that in general use today. In addition, he calls attention to the long continuing nature of thyroid diseases, and the necessity for judging the effectiveness of treatment over a lifetime rather than by single observation of the patient. He is committed to the belief that goiter is always a dysfunction, never a simple quantitative change in the amount of secretion. He is also convinced that if the clinical and pathological studies are thorough they can be adequately correlated. His tendency is essentially toward total thyroidectomy.

The book is very readable. It is often enlivened by the author's running comments and facetious or at times sarcastic debating style. There are 181 illustrations which impressed the reviewer as being somewhat more than are necessarily helpful. The book is written by a clinician who has obviously developed an excellent clinical judgment, and who has obviously become distrustful of laboratory methods in diagnosis. It is therefore, not extremely helpful to the beginner in such a field. The value of the volume is chiefly for the special student of goiter surgery, who is interested in knowing the current points of view of various men.

The author would profit by having to defend his point of view in verbal debate with a friendly critic who would challenge his frequently unsupported statements. E. L. S.

The Story of Medicine in the Middle Ages. David Riesman, M.D., Sc.D. Paul B. Hoeber, 1935. $5.00.

Ancient and modern medical histories are numerous but there are few that deal in a connected way with the medieval period. Dr. Riesman takes these Dark Ages and most entertainingly tells the story of the slow halting development toward modern times. The school of Salerno, Arabian Medicine, Astrology, Alchemy, the rise of the Universities, and the birth of anatomy and surgery as sciences are topics making up the bulk of the book. Chapters on the medieval diseases and epidemics such as leprosy, plague, epilepsy, syphilis and the dancing manias add interest and color to the story. The volume is excellently printed and profusely illustrated. It has permanent value and is worthy of a place in any library. W. J. M.

A Textbook of General Bacteriology. (Eleventh Edition). The new (eleventh) edition of Jordan's Bacteriology is an excellent successor to those that have gone before. Clearly written and well-organized, the material is admirably presented and up-to-date in detail. The chapters on the diseases caused by the protozoa and those caused by the filterable viruses are especially good for such brief presentations. P. F. C.

The Treatment of Diabetes Mellitus. By Elliott P. Joslin, M. D., medical director, George F. Baker Clinic, New England Deaconess Hospital; clinical professor of medicine, Harvard Medical School. Fifth edition, revised anad rewritten. Price $6.00. Lea & Febiger, Philadelphia, Pa.

This volume is more than a fifth revision of the text which has been recognized throughout this country as the most complete and authoritative discussion of diabetes mellitus. The new volume is less than two-thirds the length of the previous edition. This very unusual and gratifying reduction in the amount of printed matter has been accomplished by a selective process which eliminated much in the history of the subject. There have been revised orders of approach to the different physiological problems. Increased attention is given to the complications of diabetes such as cardiovascular disease, disturbances of the nervous system and special senses, and the difficulties with infections including tuberculosis. The increased significance of endocrinology leads to a new chapter. It is apparent that the book has really been rewritten in its entirety. The dietary data in the book is somewhat more condensed than before, and has been revised to accord with the most recent results from the United States Government Laboratories.

This book is, therefore, commended to all clinicians and students of medicine who want an authoritative, up-to-date discussion of this important disease. E. L. S.

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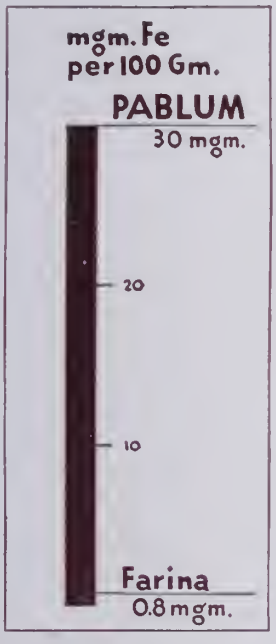

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IN THIS ISSUE

TUBERCULOSIS
By H. E. Dearholt, M. D.

ACNE VULGARIS
By S. M. Markson, M. D.
H. L. Miller, M. D.

TOXICOLOGICAL EXAMINATION
By F. L. Kozelka, Ph. D.

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TABLE OF CONTENTS PAGE 880

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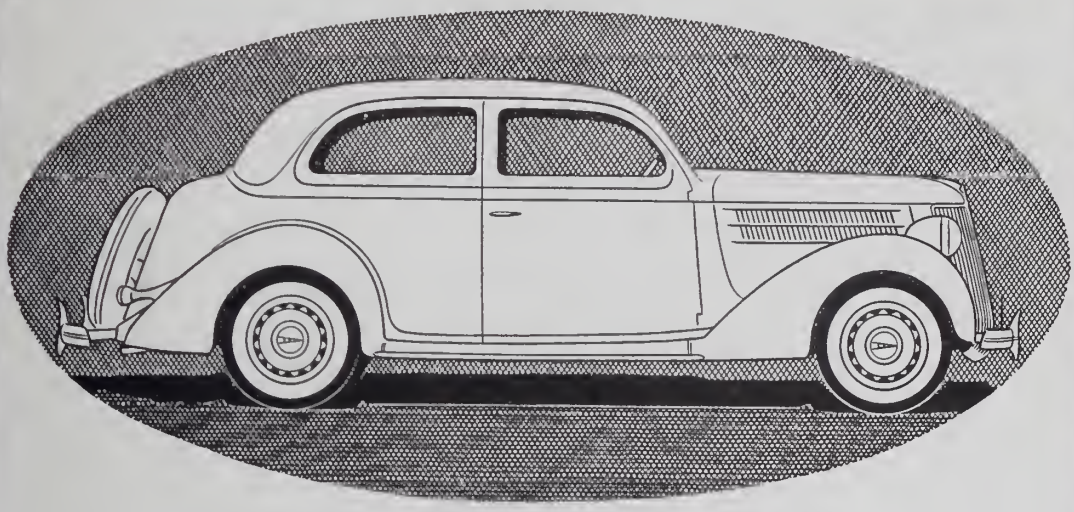

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TABLE OF CONTENTS

ORIGINAL ARTICLES

Page

Tuberculosis and the Family Doctor by Hoyt E. Dearholt, M.D., Milwaukee ---- 891
Acne Vulgaris; Discussion of Some Aspects by S. M. Markson, M.D., and Harold L. Miller, M.D., Milwaukee ---- 895
Selection of Material for a Toxicological Examination by Frank L. Kozelka, Ph.D., Madison 898
Treatment of Bromide Intoxication by Otto E. Toenhart, Ph.D., M.D., Madison ---- 901
Surgical Infection of the Kidney by William J. Carson, M.D., Milwaukee ---- 903
Ludwig's Angina (Suprahyoid Phlegmon) by R. P. Gingrass, M.D., D.D.S., Milwaukee ---- 905
The Importance of Prenatal Care by Amy Louise Hunter, M.D., Madison ---- 908
Recent Methods in Prevention of Disease; Critical Review by A. B. Schwartz, M.D., Milwaukee ---- 911
The Diabetic as a Surgical Risk by E. M. Jordan, M.D., Green Bay ---- 918
Carcinoma of the Testicle; Postoperative Sequelae, Treatment and Comments by F. H. Kuegle, M.D., Janesville ---- 920

EDITORIALS

Page

Necessary Procedure ---- 922
This Business of Medicine ---- 922
Help Your Secretary ---- 923

MISCELLANY

The President's Page ---- 924
Society Proceedings ---- 926
The Woman's Auxiliary ---- 928
News Items and Personals ---- 931
Births, Marriages, Deaths ---- 931
Medical Economics ---- 933
New State Narcotic Act Effective January First; Major Provisions Summarized ---- 934
Proceedings, House of Delegates ---- 937
Attendance, House of Delegates ---- 978
Proceedings of the Council ---- 980
Officers–Committees, State Medical Society ---- 984
Membership of State Medical Society ---- 987
Books Received for Review ---- 1000
Book Reviews ---- 1000
Exchange Advertisements ---- 1007
Index for Year 1935 ---- 1009

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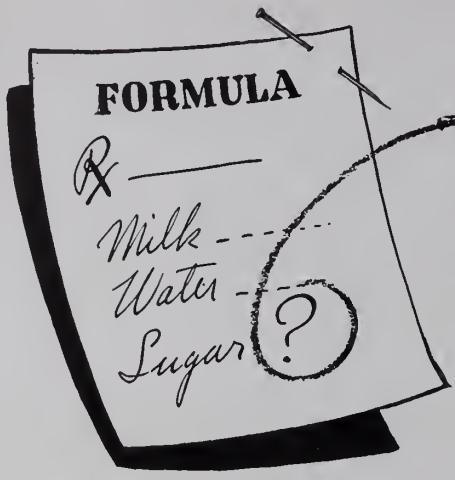

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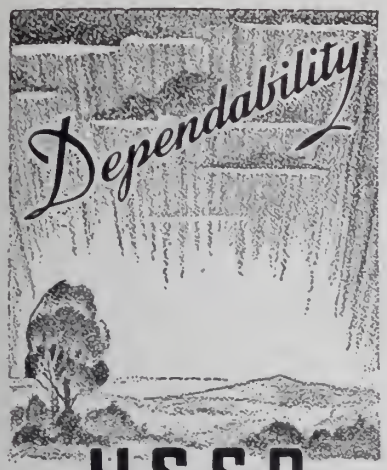

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(1) 1934. Ind. Eng. Chem. 26, 758
(2) 1932. Ind. Eng. Chem. 24, 650

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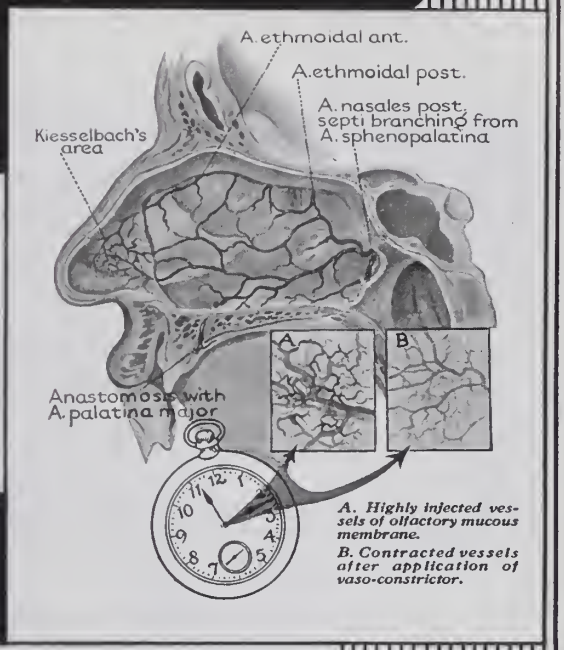

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THE WISCONSIN MEDICAL JOURNAL

Volume XXXIV DECEMBER, 1935 Number 12

Tuberculosis and the Family Doctor*

By HOYT E. DEARHOLT, M. D.

Executive Secretary, Wisconsin Anti-Tuberculosis Association, Milwaukee

PRIOR to 1905, at which time the Medical Society of Milwaukee County appointed a Tuberculosis Commission and charged it with the responsibility of launching a public campaign against the disease, there were sporadic efforts made in the State Medical Society and by medical organizations and leading physicians here and elsewhere in the United States to draw the medical profession and the lay public together in some form of offensive coalition to change the tuberculosis situation. This disease then led all causes of death here and throughout the nation. Twenty years before, Koch had proved it to be a communicable and hence preventable disease. But, obviously, it was not being satisfactorily prevented along the lines this great discoverer had confidently predicted would lead to its rapid extermination.

Throughout medical history, the disease was known to be occasionally, but all too rarely, cured.

Between 1905 and 1908, a travelling educational exhibit was designed and fabricated under the direction of such great medical men as Osler, Welsh, Farrand, Ravenel, Billings, and many others and was brought to Milwaukee by the Tuberculosis Commission of the Milwaukee County Medical Society with some 14 lay and professional organizations cooperating. Incidentally, previous attendance records were broken in Milwaukee and not subsequently equalled in any American city until the International Congress on Tuberculosis was held in Washington in 1908 for which a new educational exhibit was created. The W.A.T.A. was organized in that year to continue the educational campaign and to secure better facilities for the prevention and cure of the disease. Members of good repute in the state and county medical societies have from then until the present time dominated its principles, policies, and practices.

During the period from 1908 to our entry into the World War, a great awakening had been accomplished among the citizenship of the state which led, among other things, to the provision of several county sanatoria advantageously located to serve neighborhood tuberculous families and the needs of the local medical men for more adequate therapeutic facilities. Local doctors, interested but hitherto practically inexperienced in tuberculosis work, were chosen as attending physicians. The demand for beds soon exceeded the supply (as it has continued to do ever since), and the taxpayers generously provided more and better accommodations for their tuberculous neighbors. An encouraging number of cures were wrought but not enough to satisfy moderate and reasonable demands because an overwhelming proportion (85 to 90 per cent or more) arrived for their treatment in advanced stages of the disease.

Then came the World War and 60,000 Wisconsin young men were called up for examination. Of the 45,000 actually examined, 33,000 were passed by the examination boards for military service, and 12,000 were declared unfit. Because tuberculosis was then (and still is, in spite of remarkable gains recorded) the most deadly disease of early adult years, it was obvious that among the men called up in the draft, tuberculosis would be encountered more frequently than any other serious constitutional disease. Furthermore, had it not already been realized from our general medical knowledge that

* Presented before 94th Anniversary Meeting, State Medical Society of Wisconsin, Milwaukee, Sept. 23, 1935.

the service would rapidly break down borderline cases, the tuberculosis experience of the French army would have left no doubt. By February, 1917, France had returned 150,000 tuberculous soldiers to civil life. And here, may I digress for a moment to pay my respect to the memory of Gorgas and Bushnell, particularly, for the intelligence they displayed in respect to the tuberculosis hazard and also for the manner in which they availed themselves of the assistance that the voluntary tuberculosis associations offered. Largely because America had had ten years of organized anti-tuberculosis experience such as France never had, nor been hitherto receptive to, we escaped paying as heavily as that nation was required to.

Following the war and still under the high ideals it inspired, it was resolved here in Wisconsin that we should extend the lessons of the draft examinations to the on-coming youth. And particularly to the girls and young women who had not been put through such a screen and who, by and large, die in this age period in twice the number as do their brothers from this preventable and curable disease. So the travelling chest clinic was organized by the W.A.T.A. and something equivalent to the war-time draft examinations was attempted. This enterprise was very favorably received by the vast majority of members of the Wisconsin medical profession. Most saw in it a great opportunity for the medical profession and obligation to the lay public and supported it accordingly. We of the organization tried in every way to make this clinic enterprise *supplement* and not supplant the efforts of the family doctor. Always having believed that he was most advantageously situated to influence the tuberculosis patient, every care was taken to avoid, so far as possible, any offense to the dignity and prestige of the local physician. Consequently, the clinic work of the W.A.T.A. has centered on an effort to uncover concealed and neglected cases. So, through the years, more than 60% of all patients seen by us have been referred to their family physicians for confirmation or rejection of provisional diagnoses, for more prolonged observation and repeated examinations, or for suggested therapy of one kind or another.

In 1923, at the urgent request of the authorities of the Milwaukee Vocational School, we undertook an extensive experiment in the way of discovering early tuberculosis among the apparently healthy boy and girl students of this most remarkable of schools. 5300 pupils—presumably from a social class which would present a very large amount of tuberculosis—were examined. The results were terrible! The examiners were above the average in diagnostic ability. Every facility, including expert consultation of a highly trained tuberculosis specialist, was afforded. But, we discovered tuberculosis where it did not exist and missed where it did. And we were too ignorant to realize that we had made a very great and significant accidental discovery—the import of which did not come to us until years later. Instead of realizing we had attempted the well-nigh impossible, we were secretly ashamed of our young assistants and could not understand why there had been such a fall-down in the actual discovery of cases our general knowledge assured us must be there in considerable numbers. I shall recur to this subject later.

In this general period, the decline in the tuberculosis death rate was very rapid. Probably for some years past, the incidence of living cases had been dropping even more rapidly than the death rate. But, of this latter conviction, we have no certain proof because at no time have we ever been sure of the number of persons harboring the disease in a latent form. Meantime, so far as the practical aspects of finding tuberculous disease were concerned, we had gone on presuming that infection was practically universal.

Meantime, an occasional research student, here and there, tuberculin tested sizeable groups of apparently healthy children. Their statistics varied amazingly. In Philadelphia, for example, 70 to 80 percent of high school students reacted as against 10 to 20 percent of similar ages in some of our midwestern states. Many of our professors discredited our tuberculin or the technique employed in the hinterland, and continued to teach the

universality of tuberculous infection by early adult years and that, as a diagnostic measure, it was useful in eliminating a diagnosis of tuberculosis only in the very early years of life. And so the more general use of this great diagnostic aid was denied the general practitioner of medicine altogether too long.

THE CHEST FILM

But of greater value to the medical profession than the tuberculin test is the x-ray chest film which is only now *beginning* to come into its own. Chest films are tricky things which call for good machines and special technique in their taking, but, most of all, for highly specialized and experienced skill in interpretation. I refer here, of course, to the very early or minimal case and not to the advanced disease which can be diagnosed by routine physical and sputum examinations.

It appears to me that in pulmonary tuberculosis, general practitoners are likely to err in expecting too much from a single x-ray examination. While a good film may tell a lot to an experienced interpreter, the most perfect one obtainable can really give but a partial shadow picture of what has taken place in what is actually a vast three dimensional area. Whether the process is active or arrested may be inferentially guessed at, but, without other evidence, positive deductions are unwarrantable. One should not hesitate, therefore, to call for serial films spaced at appropriate intervals to permit observation of such changes as ordinarily occur very slowly in pulmonary tuberculosis. And here let me say that after hearing the disputes which frequently occur among the members of our medical staff and other specialists as to the significance of this or that shadow, it does not seem incumbent upon any physician to appear to be more certain of his deductions than he really is.

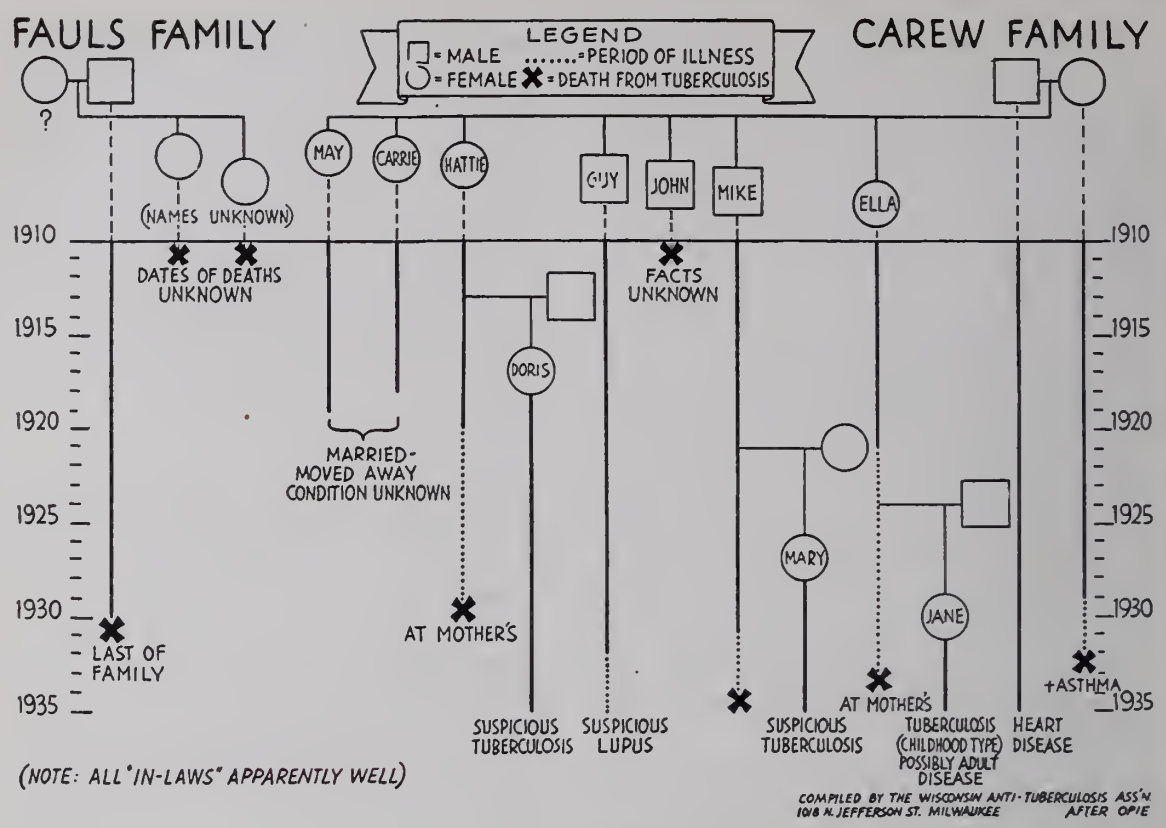
In this connection, I am led to say a few words about the W.A.T.A. film consultation service. This has grown to rather imposing proportions without anything but the most casual advertising on our part. So far this year, an average of better than two films per day have come to us from 113 private practitioners in 38 counties. This takes no account of special clinics, sanatorium and other similar film reading services. In the "American Review of Tuberculosis" of November, 1934, Simons and Simons writing on "The Problems of the General Practitioner in Tuberculosis" advocate "the designation of some individual or institution where accurate interpretation of thoracic films of tuberculosis suspects could be obtained without cost to the patient or practitioner." This is the sort of service the W.A.T.A. set up some six years ago.

You will have noticed that I have not put the stethoscope and the plexor and pleximeter in their old time-honored places among the instruments recommended for an early diagnosis of pulmonary tuberculosis. They still have a place beyond a doubt, but it is an increasingly less important place. In the 1923 Vocational School study referred to above, we erred principally in holding to an unjustifiable confidence in the ability of better than average diagnosticians to detect signs of early tuberculosis by this primary means.

CASE HISTORIES

And now I come to what I believe to be far and away the most important and the most neglected facility in arriving at a correct early diagnosis of early tuberculosis—*viz.*, personal and family *history*. A good history has always been important and valuable but it has never in the past been so important as it is today and as it will be henceforth. When it could be assumed that *everybody* was *infected* and pretty much everybody was more or less diseased, a history—important as it was—had less significance than it does now. For, tuberculosis from a large social viewpoint is gradually becoming a comparatively rare disease *except in spots*. And those exceptional spots become as all important to the physician as are to a fisherman those pools which still harbor an occasional trout in a stream which has for the most part been fished out.

Now I approach the conclusion toward which this paper has been aimed and that conclusion is rather more in the form of a question than an answer. Who is going to



TUBERCULOSIS—A FAMILY DISEASE

We have here two families, the Fauls Family and the Carew Family, who were neighbors and both of which were riddled by tuberculosis.

The father of the Fauls family had tuberculosis and died of it in 1930 at the age of 61. We do not have any information as to his wife. The father is reported to us as the last of his family.

The mother of the Carew family had tuberculosis. She died in 1932 from a complication of disease including asthma and chronic pulmonary tuberculosis. Mr. Carew is still living, but suffering from heart disease.

Now we get to the next generation level. The Fauls family had two daughters, whose names we do not know, but we do know that they died of tuberculosis in youth. We also know that the girls of the Carew family, who were neighbors, as you remember, of the Fauls family, had an intimate association with the Fauls girls, often sleeping with them during their illness.

There were seven of these young Carews. The two oldest, Mayme and Carrie, were married and left the home before active disease appeared in the Carew family. As far as we know, they are well.

The next, Hattie, grew to womanhood, married and had one child, Doris. Hattie developed tuberculosis and died at her mother's, old Mrs. Carew, in 1929 after several years of illness. Her husband is living and apparently well, but their child, Doris, is now a suspiciously active case. She was eleven years old at her mother's death from tuberculosis, and therefore no doubt had a long and intimate period of exposure; since her mother's death she has lived with her grandmother, who you remember also died of tuberculosis and who no doubt subjected the child to still further doses of infection.

The fourth Carew child was Guy, who grew to manhood but who never married. He lived at home and is now a suspicious lupus case.

The next of the Carews was a son, John. He died of tuberculosis many years ago.

The sixth was Mike, who grew up, married, and had a daughter, Mary. Mike died in 1934 from tuberculosis after a three years' illness. The wife is apparently well, but the child, Mary, is now a suspicious case. She was seven years old at the father's death.

The last of the Carews was Ella who grew up, married, and had a child, Jane. She early developed tuberculosis, was deserted by her husband, and died of tuberculosis in 1933 after 12 years' illness and at the home of her mother, old Mrs. Carew. The child, Jane, now 5, who was reared in a home where her mother and grandmother both had tuberculosis, is now a childhood type case, with possibly adult disease.

(Names fictitious to prevent identification)

discover the diminishing numbers of tuberculosis cases and trace the lines of contagion to their sources in order that those sources can be dried up? It isn't an ordinary medical case-problem in diagnosis because these early victims ordinarily do not have symptoms such as ordinarily drive patients to their physician. No, they are apparently well people who must be run after because they do not know they are *it*. In short, it's an epidemiological problem. Now, epidemiology has come, in the highly specialized times in which we live, to be considered almost entirely a function of public health administration rather than a part of the private practice of medicine. Perhaps it *must be*, but I am not yet content that it *should be* so left because I am not yet convinced that the family doctor cannot, if he will, do a better job of it than public officials are likely

to. And I suspect that as our tax burdens grow heavier and heavier, there will be less —rather than more—financial public support with which to work out any but the clearly defined public problems. Be that all as it may, the job will require knowing personal and family tuberculosis contact histories as nobody, so much as the family physician, has the opportunity to know or learn them.

Opie and associates at the Phipps Institute, Philadelphia, have done beautifully the kind of individual and family work I should like to see the private physicians of Wisconsin do in their family practice. While carrying on a thorough-going study of the individual patient's symptoms and clinical and laboratory signs, they are no less concerned in the family problem. For they realize that they must see the family as a whole without losing sight of the individual member. More specifically, they keep reminding themselves in their routine work that *"tuberculosis is an epidemic family disease,"* as Opie says. Knowing that every case comes from a previous case—most likely nowadays to be a family contact—they and other tuberculosis specialists back-track to find the source of the infection which may be old or new. Frequently, that source is found in grandfather or grandmother whose "bronchial cough" has been a most potent spreader of infection.

To visualize the family history and to form and correct their own perspective, Opie and his associates employ a graphic chart of the family history which is very suggestive of the graphic charts and maps epidemiologists use in tracing sources of epidemics of acute contagious disease. The accompanying chart is of a Wisconsin family recorded after their method. Diagramming tuberculous and suspect families in some such form not alone helps to clarify the immediate case problem but also throws into strong relief the potential new cases upon whom follow-up work should be pursued for years to come.

CONCLUSION

In conclusion, I wish to reassert the argument which has run, inferentially at least, throughout this paper. The family physicians of this vast state of 50,000 square miles can, if they will, do a better job of suspecting and watching the prospective new cases year in and year out than any other conceivable agency. Nowhere, I think, have I suggested that it is an easy job to keep everlastingly following up tuberculosis suspects until suspicion has been confirmed or ruled out. Nor have I suggested anywhere that by itself will it be a particularly lucrative type of work. But if we are correct in our faith and predictions that tuberculosis is losing its overwhelming public epidemic proportions and becoming preponderantly a family disease problem, there would seem to be no escape from the conclusion that the family physician will have to help his families solve it. And, if we of the W.A.T.A. can help unostentatiously the family physician on the job to do a better job in his own behalf and that of his patients, we shall be proud to be commanded.

Acne Vulgaris; Discussion of Some Aspects*

By S. M. MARKSON, M. D., and HAROLD L. MILLER, M. D.
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ACNE is one of the commonest of all skin diseases occurring during adolescence. The disease, while not serious from the standpoint of its pathology, is of great importance to the young patient from the cosmetic and mental angles. Coming on at that period in life, these young persons suffer from a peculiar state of mind which may be styled as an inferiority complex, the degree of which depends on the duration and severity of the acne. Such persons regard themselves as outcasts, they shun society and feel as if they have been branded as unclean. They stay at home for days at a time, and we know of cases in which patients even gave up college. It is because of the fre-

* Clinical conference, Mt. Sinai Hospital, December, 1934.

quency of such tragedies, many of which could be avoided, that this paper is presented.

Acne is an inflammatory affection of the sebaceous follicles, characterized by three distinct lesions, the comedo, papule, and pustule. It may be asserted that the majority of adults, male or female, have not passed through the period of adolescence without having at least a mild form of acne either upon the face or upper portion of the back. These are the regions upon which the affection is most apt to appear. In cases where the face is affected in a marked degree, the back, shoulders and breast may be slightly affected, or remain perfectly free; while, on the other hand, in cases where the back is covered with the lesions of acne, the face may be nearly or wholly exempt.

The primary lesion of acne is the "blackhead" or comedo produced by mechanical blockage of the sebaceous gland with the degeneration of sebum or fat. The secondary lesion results from inflammation of the comedo, resulting in a solid, elevated lesion, the papule. The third lesion the pustule is due to infection by bacteria. Extension and enlargement of the pustules produce pus pockets or abscesses which result in deep hard scars, most disfiguring and very difficult to remove.

The eruptions of this affliction appear in crops; indeed, new lesions, appearing faster than the old ones disappear. Month after month the skin becomes more and more thickened by the products of inflammation; the skin takes on a dirty, oily hue; there is enlargement of the pilosebaceous openings; with a thickening of the skin which takes on a coarse grained appearance. New lesions may continue to present themselves for years, if untreated. In girls, outbreaks of the eruption may occur just before, during, or immediately after each menstrual period. In time the disease disappears, even without treatment, but who would be so foolish as to wait for such a possible event? The other reason for treating acne is to prevent scarring as often deep pits remain on the site of former pustules, resembling the marks left by variola.

ETIOLOGY

The etiology of acne is unknown. The main theories of the cause of acne are that it is due to toxic substances, i.e., either from:

1. Secretion of the endocrine glands. . . At adolescence all glands of the body are over-active. This is due to the new function of the gonads. This toxin from the sexual glands irritates the bases of the sebaceous and sweat glands to hyperfunction and hypersecretion. The oversecretion of the sweat glands sets the soil so that the sebaceous glands are mechanically blocked, producing the comedo, and infection then takes place, producing the papule, the pustule, and the abscess. Or,

2. Constipation with resulting autointoxication from albumin bodies derived from such foods as fats and sugar.

Contributing causes in the production of acne include:

(a) Focal infections as infected teeth or tonsils.

(b) Anemias.

(c) Menstrual disorders.

(d) Halogens: Everyone is familiar with the acneform type of eruptions from ingestion of bromides and iodides. These halogens often aggravate an ordinary case of acne and all patients must be questioned regarding their use either in "blood or nerve tonics." Cases of acne have been reported by Shelmire, Dennie and Bechet[1] from the use of iodized salt; other foods that contain iodine are sea foods, fat, and chocolate.

(e) Sensitization due to certain foods. Theoretically any food may cause acneform eruption according to White[2a, 2b]; the six most common foods are chocolate, milk, wheat, oranges, tomatoes, and nuts. According to Wise and Sulzberger[3], it isn't wheat that these individuals are susceptible to but to the so-called baking improvers that contain a high percentage of potassium bromate. The bromate in the baking process becomes reduced to bromide.

The common type of acne is generally over the face, cheeks and chin with or without involvement of the shoulders and back.

Forehead acne is often associated with seborrhea of the scalp which must be treated to obtain results.

Chin acne is usually associated with ovarian dysfunction and usually occurs after the age of twenty-five.

Collar area or jaw acne occurs in men and is very often aggravated by external irritation such as in the process of shaving.

Occupational acnes occur on unusual areas, such as the arms and are caused by grease and oil.

Chlor-acne from exposure to chlorine gas in manufacture of rayon.

THE TREATMENT OF ACNE

The physician must at first produce an improvement in the mental condition of the patient by giving sympathetic advice and by giving optimistic prognosis. Then he must institute the proper treatment, i.e.:

1. Reduce the sexual toxin by advocating muscular sport and muscle work and plenty of fresh air.

2. Reduce constipation by the addition of fresh fruits and vegetables. Restrict carbohydrates with particular emphasis on candy, syrups, pastries, soda water, bread, rice and potatoes. Fried articles should be excluded from the diet.

3. Prohibit use of iodized salt, sea foods, chocolates and fats which contain the halogens.

Patient is instructed thusly:

You may eat all meats if lean, boiled, or broiled. All fruits, raw or cooked, (except bananas). Vegetables containing only very small amounts of starch. To increase amount of fruits and vegetables to a maximum.

To eat liver at least twice a week.

To drink at least eight glasses of water a day.

To substitute Ry-Krisp for bread.

To avoid all cosmetic creams.

Local Treatment: At night wash face and neck thoroughly, working up a lather with tincture of green soap. Hot towels on face three to five minutes, then express all blackheads which can be easily removed by pressure with a comedone extractor. (It is essential to drain pustules and cysts.) A systematic attack must be made on the comedo, the primary lesion of acne.

Then either the following lotions are applied:

Lotio alba which contains:

Rx	Saturated solution of zinc sulphate	60|0
	Saturated solution of potassium sulphuret	45|0
	Aqua Rosae qsad	240|0

or Abramowitz's Lotion[4]

Rx	Vleminickx's Solution [(Solution of sulphurated lime NF (Filtered)]	30|0
	Saturated (1½:1) solution of zinc sulphate in rose water	20|0
	Glycerin	5|0

The lotion is applied freely over the affected area and allowed to remain over night. It dries in about five minutes. In the morning it is wiped off with a dry cloth, then washed with soap and water. If the skin should become irritated and scaly, the lotion is discontinued for a few nights.

The scalp should be shampooed once a week either with tincture of green soap or tar soap.

During the day the following lotion, which dries on the skin and can be substituted for powder, can be used:

Rx	Boric Acid	10|0
	Biborate Sodium	10|0
	Aquae Calcis qsad	120|0

It has been shown by innumerable reports that vaccines, bacteriophages, nonspecific therapy as foreign proteins such as milk and typhoid, and drugs as manganese butyrate and the tin preparations (stannoxyl) are of little use or only temporary in action.

Ultraviolet light and cold quartz in erythema doses produce exfoliation and can be substituted for the lotions listed above. It can be used in juvenile type of acne, 10 to 14 years of age, before complete development of adolescence where x-ray is contraindicated, Mac Kee.[5]

Tobias[6] declares that only two agents will permanently cure acne — nature and the roentgen ray. To leave it to nature will cause unnecessary scarring. The most popular method of treating acne is x-ray therapy. It is indicated in about 80 per cent of the cases. Its advantages are the rapidity of response, the simplicity of technic and the greater percentages of cures obtained. The best responses are in the severe indurated cases characterized by excessive oiliness, deep hypertrophic lesions and pustulations.

The treatment is least beneficial in the mild acnes and juvenile type where the lesions are few and scattered.

Method of treatment as advocated by MacKee.[7]

Dietary regulations as listed above.

No medicinal applications, such as sulphur, mercury or resorcin lotions to be used in conjunction with x-ray.

Affected parts should be washed daily with soap and water, and the larger pustules evacuated.

Known relapses in x-ray, twenty per cent; failure in seven per cent of the cases. With the appearance of the slightest amount of wrinkling, usually first noticed on the chin and near the mouth, calls for immediate cessation of treatment with x-rays.

When treating the face, the eyes, eyebrows, scalp, ears and chest are protected by lead or tin foil. One quarter of skin unit of 88 "r" unfiltered x-ray is given to each side of the face, anode at zygoma. Amount given 10 to 16 exposures depending on the clinical response. The treatment is stopped as soon as the condition clears up. The smaller the number of treatments necessary to obtain results, the less likelihood of relapse. If the disease does not begin to clear up after the first course of treatment, one would be hesitant about further treatment with x-rays. Blondes with fine texture skins should receive $\frac{1}{16}$ to $\frac{1}{8}$ skin unit once a week. During the first few weeks of treatment the condition often becomes aggravated due to stimulation of the sebaceous glands by the small doses of x-ray used. Patient may become disappointed with the results at this time but genuine improvement occurs in four to six weeks after commencing treatment.

CONCLUSION

The mental state of the individual must be soothed by sympathetic advice and proper treatment.

A cure can only be attained by the judicious application of the roentgen ray plus surgical measures with the addition of dietary regulation.

Relapses after apparent cure by roentgen rays are rare and amenable by a second course of treatment.

The nodular and keloidal varieties of the disease are not amenable to relief or cure by any other method than x-ray.

There are no permanent contraindications to the treatment by x-rays; temporary cosmetic stigmas are sometimes encountered, but permanent disfigurement is the result of faulty technic.

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Selection of Material for a Toxicological Examination*

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THE occasional inquiries concerning the selection of material for a toxicological examination and the inadequate material frequently submitted in cases having an important medico-legal bearing, or for diagnostic purposes, suggest that a brief discussion of the subject may be pertinent. Close cooperation between the laboratory and the attending physician will enable the toxicologist to render a more efficient and effective service.

In cases of poisoning, the vomitus or the

* From the Department of Pharmacology and Toxicology, University of Wisconsin, Madison.

first stomach washing should be saved for a chemical examination, together with large volumes of urine, if possible, and all the feces excreted should also be submitted. The examination of this material is more important than the submission of some article of food suspected of being poisoned. To be sure, it is necessary to determine the source of the poison and it is highly desirable to save specimens of all available food material and medicinal preparations at the time poisoning occurred, in case a complete investigation is necessary. It is, however, more important from the standpoint of the physician to determine the nature of the poison by an analysis of the gastric contents and excreta so as to enable him to take proper therapeutic measures. If the examination should prove positive, it should be followed by a complete investigation by the proper authorities to determine the source of the poison and fix responsibility if possible.

It frequently occurs when attending physicians have every reason to believe that the members of a family are suffering from the results of poisoning, that some one submits one article of food or other material for examination which only too frequently proves negative. In the meantime, before a report of the findings can be submitted, the material which could disclose whether or not poisoning has occurred is destroyed and the case must be relegated to the realm of the unsolved cases and forces the physician to treat the patient empirically.

In fatal cases in which poisoning is suspected, the chief value of a postmortem examination, aside from securing organs for chemical analysis, lies (1) in determining whether such appearances are present as are usually produced by a poison or at least are compatible with it, and (2) in disclosing the presence or absence of natural causes of death. It should, however, be borne in mind that the postmortem appearances produced by any poison are not always the same and even the most characteristic marks may be wholly absent. Likewise, it is scarcely necessary to state that death may occur from poison even though the person at the time was suffering from a serious or even necessarily fatal malady.

Which organs and fluids should be preserved in these cases will depend largely on circumstances. In acute cases, the poison is most easily detected in the stomach and intestinal contents. In such cases the examination of the body should begin with the abdominal cavity, the position and fullness, color, and smell of the stomach and other abdominal organs being carefully noted. Then a double ligature is placed around the lower end of the esophagus immediately above its juncture with the stomach and the duodenum is tied in two places, the ligatures being placed at a safe distance from each other so they will not slip. The duodenum is then sectioned between the two ligatures and the stomach is removed. The same procedure is followed with the small intestines. In case these organs are to be subjected to pathological examination, one of the ligatures can be cut and the contents can be emptied into a thoroughly washed container, preferably a glass-covered Mason jar. Extreme caution is to be used so as not to bring the organs in contact with possible poisonous substances. While it seems to be frequently considered sufficient to remove only the stomach and a portion of the intestines for a chemical examination in cases of poisoning, yet it should be remembered that the poison that is found in the stomach has not as yet been absorbed, with few exceptions, and taken an active part in the poisoning, as, for all intents and purposes this poison is still outside the body. Furthermore, the stomach may show no poison owing to its elimination either by absorption or by vomiting, so that the results of the examination of this organ alone may be negative, when quite appreciable amounts may be found in other organs and body fluids.

In all cases, the toxicologist should receive, with the stomach and intestinal contents, a large part of the liver (of which he should know the total weight) to test for metals, organic acids, barbiturates, sulfonal, alcohol, etc.: the kidneys for metals, and in those cases showing uremic symptoms, pieces of the kidney should be fixed for a histological examination because narcotic or convulsive poisoning may be simulated by uremia, or such claims may be advanced.

The lungs should be examined for the presence of inhaled gases because it is possible, for instance, to recover chloroform from the lungs even long after death. The examination of the lungs may tend to prove whether the poison entered by inhalation.

In some cases, particularly those which may necessitate court action, a portion (100 to 200 grams) of the brain is essential to test for alcohol, chloroform, ether, benzol, alkaloids, barbiturates, etc.

In addition to portions of the various organs, the urine contained within the bladder should always be saved. It should be drawn with a clean catheter into a clean bottle. It will contain any of the diffusible poisons, such as strychnine, arsenic, barbiturates, alcohol, phenolic derivatives, etc. Benzene, toluene and the xylenes are excreted for the most part through the lungs but small amounts are oxidized in the system and excreted in the urine, benzene as phenol, toluene in the form of hippuric acid, and xylene as toluric acid. Aniline and nitrobenzene appear in the urine as parahydroxy aniline.

A portion of the blood should be obtained, particularly in those cases in which the spectrum analysis may be expected to furnish important information as to the presence of methemoglobin, carbon monoxide-hemoglobin, or parahydroxy aniline which is present in the blood in cases of poisoning with aniline, nitrobenzene or acetanilid, and which imparts to the blood the chocolate-brown color. In cases of suspected poisoning with shoe dyes (nitrobenzene or aniline), an examination of the blood and urine is a more effective diagnostic procedure than the analysis of the dye itself although the analysis of the dye is highly desirable to establish the source and to complete the case. A specimen of the blood is also of importance in case there is a possibility that death may be due to acute alcoholism.

CEREBROSPINAL FLUID

The cerebrospinal fluid is important on account of the grain or wood alcohol it may contain or any diffusible substance which may diffuse into the spinal canal. Recently it has been reported that after the administration of large doses of barbiturates, either with homicidal or suicidal intent, small amounts were found in the spinal fluid. Since the various barbituric acid derivatives are quite generally used and freely available, the analysis of the cerebrospinal fluid, the blood and urine may tend to establish whether a lethal dose has been administered and absorbed and is far in excess of the amount which would legitimately be present from ordinary medication.

Amytal, neonal, and nembutal are for the most part destroyed in the body and apparently only traces appear in the urine, together with their degradation products. While it is possible to definitely establish that a barbiturate has been taken by examining the urine, it is difficult to determine which of the above barbiturates is involved because the specific identification of the various barbiturates depends upon the determination of the melting point of the purified product. The degradation products do not give the same color reaction as the original barbiturate, and the melting point is decidedly lower. Consequently, an examination of the blood and cerebrospinal fluid will enable the analyst to definitely establish the identity of the barbiturate administered.

If the patient lives several days, the poisonous gases, volatile poisons and the alkaloids cannot be found because they will have been either excreted or destroyed. The metals, however, can be found as permanent deposits in some of the tissue. Lead, having chemical properties similar to calcium, is deposited in the bones; arsenic, while it disappears almost completely from the soft tissues in five or six days after ingestion, is permanently deposited in all keratin-containing tissue such as the hair, nails and skin. Some of the other more common poisons will be discussed in greater detail in subsequent communications.

Each organ is preferably placed in a separate wide-mouthed, glass-covered jar which, it is seemingly unnecessary to add, should be thoroughly washed just before using, even though it appears to be clean. The jars containing the different organs should be carefully sealed as soon as practicable after the parts have been placed in them, carefully

packed in a suitable container and wrapped with fairly durable paper. Melted sealing wax should be dropped at numerous points on the exposed edge of the wrapping paper and at intervals on the tape or twine, and impressions made in the wax with a seal or ring which cannot be easily duplicated. If the sealing is properly done, it is quite impossible to gain access to the jars without mutilating the package, and it affords a perfect safeguard, therefore, against secret tampering with the organs while they are being conveyed to the chemist for examination. It is, perhaps, unnecessary to mention that identity of the organs examined in a case of poisoning be established beyond any doubt as those removed from a certain body. The greatest care must be exercised in order to prevent any possibility of a question arising as to the source of the organs examined.

It is better to add nothing to the organs to preserve them. *It is better to prevent decomposition by keeping them in a cold place, because the preservatives which could be used interfere with the detection of certain poisons.* Embalming fluids containing formaldehyde, methyl or ethyl alcohol prevent the detection of poisoning with cyanide because the cyanide combines with the formaldehyde to form isonitrils for which there is no characteristic test. Formaldehyde also prevents the detection of methyl alcohol because the initial step in its detection and quantitation is the oxidation of the alcohol to formaldehyde. The presence of the ethyl alcohol prevents ascertaining whether or not death was due to acute alcoholism. If refrigeration is not available, a little pure alcohol may be used as the least harmful of any preservatives, a few ounces of the alcohol used being reserved and sent to the chemist with the organs to be tested for the presence of extraneous substances. If alcohol is added to the organs, some of the body fluids should be left untreated to test for the possibility of an acute alcoholic death. The writer has a personal acquaintance with several cases in which death apparently was due to acute alcoholism or methyl alcohol poisoning, but the specimens were rendered valueless because embalming fluid was added to the organs and no untreated organ or fluid was available.

Inasmuch as there are almost an unlimited number of substances which may cause death, it is essential that all information which may furnish a clue to the nature of the poison be furnished the analyst. Of major importance are the symptoms of poisoning, the time elapsing between the onset of the symptoms and the death of the victim, and a complete account of the autopsy. The analyst may then direct his attention especially to that poison, or closely related poisons, capable of producing such symptoms.

Treatment of Bromide Intoxication

By OTTO E. TOENHART, Ph. D., M. D.
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THE problem of quickly removing bromides from the body in cases of bromide intoxication merits attention. In the past, sodium chloride administered enterally and parenterally has been the chief method of facilitating bromide elimination. Some authors advise against this procedure in the face of a high blood bromide content.[1] Yet, in severe intoxications, it is imperative to remove bromides from the tissues and blood stream. The following physiological and chemical considerations suggested a therapeutic procedure in cases of bromide intoxication.

With bromides in the blood stream, hydrobromic acid is secreted by the stomach.[2] If the ratio of bromides to chlorides is anywhere near the ratio of these ions in the blood stream in cases of severe bromide intoxication, then gastric aspiration should offer a logical and effective method of attack. Chemically, chlorides and bromides are closely related. Moreover, the body economy of these ions is similar in that both hydrochloric and hydrobromic acids are secreted by the stomach, neutralized and absorbed in the intestine. Very little bromide is found in the feces in cases of bromism.

Thus gastric aspiration breaks up a vicious cycle of secretion and absorption of bromides.

In regard to the amount of chlorides normally secreted by the stomach, Howell[3] states that in 24 hours, the gastric glands secrete from two to three times as much chloride as is found in the blood. In bromide intoxication, one should, under ideal conditions, remove all the bromide (and incidentally chloride) secreted by the stomach and replace this by an equivalent of chloride.

The following case of bromide intoxication was treated with the above considerations in mind:

Mrs. J. I., a 49-year-old, white, American housewife, was referred to the State of Wisconsin General Hospital with a letter from her local doctor stating that she had chronic hypertrophic arthritis of the spine. On admission at 9:00 P. M., she was restless and was talking incoherently. She fell asleep, but her facial muscles twitched constantly. Five hours after admission she got out of bed, walked with a staggering gait, became combative and abusive, and had to be restrained. She vomited a small amount of yellowish mucoid material. Neurological examination revealed ataxia, bulbar type of dysarthria, hyperflexia with bilateral ankle cloni. Mentally the patient was disoriented and irrational. Eleven hours after admission the blood bromides were above 300 mg. per 100 c.c., while eighteen hours after admission the spinal fluid bromides were 275 mg. per 100 c.c.

A stomach tube was introduced through the nose and the gastric contents were aspirated every three hours over a period of twelve hours. The aspirated material was dark green in color and turned black on standing. After each aspiration, 200 c.c. of water were introduced through the tube. On succeeding days the aspiration was repeated with variations of the procedure. Thus, Ewald meals, small amounts of alcohol, and histamine were given to increase gastric secretion. Sodium chloride was administered through the stomach tube and subcutaneously. The patient was fed by means of the stomach tube. The following table summarizes the results. The total amount of material aspirated is of no special significance in this table, since the stomach was lavaged with water when a small volume of strongly acid material was obtained. The heading "Hours Aspirated" does not mean continuous aspiration but frequent aspiration over a period of time.

Table I

REMOVAL OF BROMIDES BY GASTRIC ASPIRATION

Day of Treatment	Hrs. Aspirated	Total vol. Aspirated	Bromide Aspir. Calc. as Gm. NaBr.	NaCl given	Blood Bromide
0	0	0	0	0	300–
1	12	770	2.54	2000 cc N.S.S. subcutaneously	
2	12	540	1.20	9.0 Gm. by mouth	
3	4	1070	0.61	1000 N.S.S. subcutaneously	135
4	2	160	0.26		
5	0	0	0	0	
6	2	380	0.37	4.0 Gm. by mouth	126
7	5	770	0.56	4.0 Gm. by mouth	

Clinically, the picture changed from that of a patient who was irrational, combative, ataxic and dysarthric on admission, to one who was rational and quite cheerful six days after treatment was started. Seven days after treatment was begun she was walking about and talking with other patients.

A survey of Table I shows that 4350 mg. of bromides were removed in three days by gastric aspiration, while in six days of treatment 5540 mg. of bromides (calculated as sodium bromide) were removed. The patient weighed 147 lbs. and her blood circulatory system would contain about 5000 c.c. of serum. By gastric aspiration, each 100 c.c. of serum was cleared of over 100 mg. of bromides.

How much bromide was excreted by the kidneys over this period of treatment could not be determined because the patient was incontinent. On the sixth day, however, a 24-hour urine specimen contained 436 mg. of bromides calculated as the sodium salt.

The serum bromide was 126 mg. per 100 c.c. that day. A rough estimate of the amount of bromide excreted in the urine can be arrived at from the following considerations:

As seen in Table I, the blood bromide on admission was above 300 mg. per 100 c.c. Unfortunately, how much above 300 mg. was not determined in the first routine laboratory examination. The spinal fluid bromide was 275 mg. If we assume that the blood bromide is two to three times the concentration of the spinal fluid bromide[4] then the first blood bromide was probably well over 400 mg. per 100 c.c. Assuming 400 mg. for purposes of discussion, the patient had about 20.0 gm. of sodium bromide in her total blood serum. On the sixth day this had fallen to 126 mg. per 100 c.c. or about 6.25 gm. total. By analysis, 5.54 gm. were removed by gastric aspiration. Then at least 9.21 gm. were excreted by the kidneys.

Other studies seem to indicate that, although the bromides may be replacing chlorides in the blood serum to the extent of 33% on a molecular equivalent basis, in the gastric juice the ratio may be one to one.

Analysis of feces revealed very little bromide to be present. Thus in another patient whose blood bromide was 120 mg. per 100 c.c. 75 gm. of feces contained only 10 mg. of bromides.

A decided improvement in procedure was effected by instituting continuous gastric aspiration. For this purpose a negative pressure apparatus was used. In another patient whose serum bromide was 118 mg. per 100 c.c., 1240 mg. of bromides were removed in 8 hours.

Continuous gastric aspiration thus appears to be an effective therapeutic procedure in cases of bromide intoxication.

(The author gratefully acknowledges the assistance of Dr. M. Starr Nichols of the Wisconsin State Laboratory of Hygiene where the chemical analyses were made.)

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Surgical Infection of the Kidney*

By WILLIAM J. CARSON, M. D.
Milwaukee

IN A previous communication, (Wisconsin Medical Journal, Sept., 1933) I discussed the etiology and pathology of renal infection, and reported 72% two-year cures obtained in 122 cases in private practice. (1926 and 1931 inclusive) Out of the 34 cases that were not cured, 5 that resisted all forms of treatment (2 males, 3 females), that had never presented any symptoms of acute appendicitis, were subjected to appendectomy in an effort to find the source of infection. In each case, microscopical examination of appendix showed evidence of inflammation. All 5 have remained free from symptoms and signs of pyelonephritis during the past two years, making a total of 93 cases (76%) cured for two or more years.

In an attempt to correlate the results obtained in private practice versus charity cases, one year ago, I requested Dr. Eugene Smith, clinical director of the Milwaukee County Dispensary, to send a letter to each case of renal infection that I had personally treated in the Dispensary from January 1, 1927, to December 31, 1931, to return for examination. Thirty-eight, or 30%, of the cases complied.

Re-examination of the 38 cases (32 females, 6 males) 27 were found to be free from all symptoms and signs, or 71% cured two or more years.

ROUTINE

Owing to the large number of cases going to the Dispensary, the usual procedure has been to obtain a catheterized specimen of urine to send to the laboratory for micro-

* From the Milwaukee County Dispensary-Emergency Hospital.
Read before the Wisconsin Urological Society, Stevens Point, May 4, 1935.

scopical examination and culture to confirm previous findings in the Clinic, and have them return in 3 days. In the event the urine was negative, another catheterized specimen of urine was obtained. If positive for pus and bacteria, urotropin, grains seven (gr. VII ss) and ammonium chloride, grains five, (gr. V) were given every three (3) hours for 10 days, to be followed by soda bicarbonate dram one (dr. 1) every three (3) hours for two days; forced fluids and magnesium sulphate dram one (dr. 1) at bedtime and told to lie on the right side for 30 minutes, returning to the Clinic on the 14th day for cultures and microscopical examination. If no improvement resulted after the two weeks' treatment, an intravenous pyelogram was ordered. The roentgenograms being examined on the next clinic day. In the event of any abnormalities in the uretero-pyleogram a cystoscopical examination and unilateral retrograde pyelogram was done. As the x-ray laboratory is not equipped for standing and sitting positions, all plates were taken in the prone position. Each case was given three (3) tablets of morphine grain one-fourth (gr. ¼) and instructed to take one in case of pain and repeat if necessary. With the diagnosis complete, further treatment was commenced. Operative cystoscopy for treatment consists of ureteral catheterization (No. 6 French) to obtain a specimen from each kidney for miscroscopical examination and culture, and the injection of 4 or 5 cc. of ½% solution of silver nitrate.

In the 32 females, varying in age from 1 year to 73 years, the majority of cases occurred between 20 and 50 years of age. Four of the cases were pregnant when first seen, two of which gave a history of repeated attacks of tonsillitis; one had abscessed teeth which were extracted during the second month of pregnancy; and one had acute appendicitis for which she was operated upon at 2½ months; 21 cases gave a history of the first symptoms occurring during or just after delivery. Para 1—9; Para 2—6; Para 3—1; Para 4—1; Para 5—1; Para 7—2; Para 8—1.

In the 7 females that had not been pregnant the focus of infection was abscessed teeth 1; abscessed teeth and lues 1; acute appendicitis 2; acute pharyngitis 1; pelvic inflammation 1; chronic appendicitis with stricture of right ureter 1.

Table I

BACTERIOLOGICAL FINDINGS IN 32 FEMALES

Pure culture of B. coli:	
Right	8
Left	3
Pure culture of staphylococcus:	
Right	13
Left	12
Pure culture of streptococci:	
Right	3
Left	3
Culture of B. coli and staphylococcus:	
Right	4
Left	3
Culture of B. coli, streptococci and staphylococcus:	
Right	1

Table II

CLINICAL DIAGNOSIS IN 32 FEMALES

Pyelonephritis in pregnancy	4
Pyelonephritis after pregnancy	21
Pyelonephritis	7
Abscess of breast	1
Pilonidal sinus infection	1
Cystocele	3
Rectocele	4
Incision hernia	1
Cholecystitis	3
Hyperthyroidism	3
Pharyngitis	2
Varicose veins	4
External hemorroids	2
Renal calculi	2
Pelvic inflammation	4
Acute appendicitis	2
Chronic appendicitis	2
Uterine fibroid	1
Urethral stricture	2
Ureteral stricture (1—10 cm. up; 1—6 cm. up.) Right	2
Tonsillitis	2
Infected teeth	7
Lues tertiary	2
Endocervicitis	3

Table III

TREATMENT OF 32 FEMALES

Appendectomy	3
Hysterectomy (fibroid)	1
Supra-vaginal hysterectomy including tubes and ovaries	1

Cholecystectomy-appendectomy	1
Thyroidectomy	1
Operative cystoscopy	70
Teeth extracted	2
Excision of infected pilonidal cyst	1
Drainage of abscess of breast	1
Cautery to cervix	2

Results 24 or 71.8% clinically cured, 6 or 18% improved.

There were 6 males varying in age from 5 years to 60 years.

Table IV

BACTERIOLOGICAL FINDINGS IN 6 MALES

Pure culture of B. coli:	
Right	2
Left	1
Pure culture of staphylococcus:	
Right	2
Left	2
Pure culture of streptococci:	
Right	1
Left	1
Culture of B. coli and staphylococcus:	
Right	1

Table V

CLINICAL DIAGNOSIS IN 6 MALES

Renal calculi:	
Right	1
Left	1
Bilateral (Parathyroid? Calcium 13.8-Phosph. 1.6)	1
Ureteral stricture:	
One with calculi in kidney pelvis	2
Tonsillitis	1
Cholecystitis	1

Table VI

TREATMENT OF 6 MALES

Ureteral dilatation	28
Tonsillectomy	1

Results: 3 or 50% clinically cured, and 2 or 33% improved.

CONCLUSIONS

Realizing that the series is small with only 30% followed up, it is evident that 71% cured in Dispensary practice is comparable to 76% in private practice, and warrants the conclusion that conservative surgical treatment and the saving of hospitalization is justifiable.

Ludwig's Angina (Suprahyoid Phlegmon)

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LUDWIG'S angina is an acute, rapidly spreading infection of the cellular planes, starting in the floor of the mouth and extending to the front of the neck. It is called Ludwig's angina after the man who first described it.

Although its existence as a definite clinical entity has been the subject of considerable discussion, we agree with Blair and others who have seen a sufficient number of cases that it is as definite in its pathology and clinical signs as pneumonia or peritonitis.

Though not very common, Ludwig's angina is of great interest because in the past it has been credited with a mortality of 40% or higher. With the method of treatment to be described the mortality rate is practically zero.

The majority of cases follow the extraction of teeth. However, some cases arise from a focus in the throat or nose and are not preceded by surgery. The dentist is often blamed by the patient and others on the ground that he used unclean instruments or injected novocain around the tooth. There is no more justice in this than there is to conclude that because a peritonitis follows an appendectomy the surgeon introduced unclean instruments into the peritoneal cavity. Most of these cases follow the extraction of lower molar and bicuspid teeth where block anesthesia is practically always used, so the injection of novocain does not seem to be the important factor in lighting up one of these cases. We think the most important factor is a low resistance on the part of the patient coupled with a virulent organism. The extractions are usually simple and most of the time but one or two teeth have been extracted. The organism is usually a streptococcus.

The usual history is that the patient has an aching tooth extracted. This is followed by a rapidly spreading swelling which at the end of 3 or 4 days has involved the whole floor of the mouth and the submental and submaxillary regions of the neck. The method of extension from the primary focus to the floor of the mouth and neck is open for debate. It probably is a combination of direct extension and lymphatic involvement. The skin may be normal in color or have a cyanotic hue, it is movable and does not pit on pressure. The front of the neck is board-like in hardness. Fluctuation is not present. Within the mouth, the induration may be felt in the floor on one or both sides. The submucosa may be so edematous as to raise the mucosa above the occlusal plane of the teeth. The mucosa is covered by a dirty gray membrane which is easily removed, exposing a fiery red surface. The tongue is pushed upward and backward. The most common complaint that the patient has is difficult deglutition and this is easily explained on the basis of the pathology and the anatomical area involved. Respiratory impediment is not marked and there is little constitutional disturbance. The temperature is usually around 102° F. The white blood count about 12,000.

It is stated in text books that resolution may take place spontaneously. We feel that it is better to treat them by radical incision and drainage immediately because one cannot foretell when a case will terminate by resolution if such a thing ever occurs. Untreated cases usually die in from 2 to 3 weeks, death being due to aspiration pneumonia, edema of the glottis or sespis from diffuse suppuration or gangrene of the deeper tissues.

TREATMENT

The treatment is essentially early free incision. One must be familiar with the anatomy of the floor of the mouth and the neck. Fig. I. We prefer general anesthesia (ethylene or nitrous oxide) to local anesthesia. When the cases are seen within the first 3 or 4 days, and they usually are, there is very little respiratory embarrassment; consequently a general anesthetic can be safely

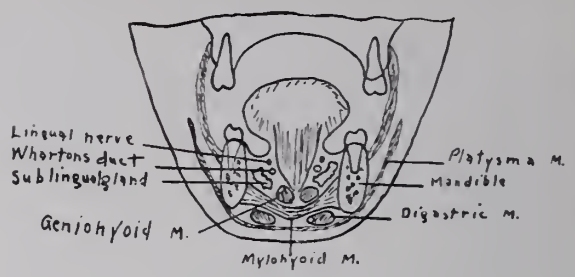

Fig. I
Floor of mouth (Coronal section)

used and furthermore the time consumed in establishing drainage is but a few minutes.

A median incision is made extending from the lower border of the mandible to the hyoid bone. Fig. 2. The incision is carried down to the mylohyoid muscle. The mylohyoid muscle is split in the midline and now a small hemostat is inserted between the mylohyoid and geniohyoid muscles and then spread open. Entrance to the floor of the mouth is thus obtained. This is followed by a large hemostat which is carried upward, backward and outward. The hemostat is now above the mylohyoid muscle and medial to the internal surface of the body of the mandible; in other words, it is in the floor of the mouth. The hemostat is opened and then withdrawn. The same procedure is repeated on the opposite side. A small fenestrated rubber tube is inserted into each opening. They are removed in about 24 hours. Frank pus is usually never seen at the time of establishing drainage. The fol-

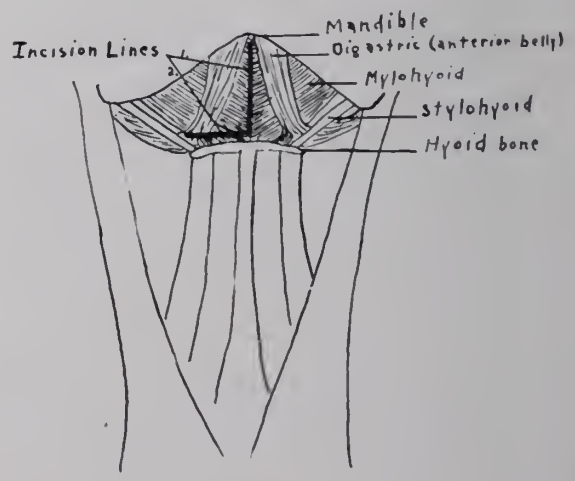

Fig. 2
Lines of incision

lowing day one may see a rather dark colored thin fluid around the incision and tubes. By the second day foul smelling pus is appearing. It is never very great in quantity. Hot magnesium sulphate dressings are applied to the neck every hour. The swelling of the neck and floor of the mouth is usually increased a little the day following the operation but it subsides gradually and in the course of a week or ten days it has disappeared, the discharge has ceased and the wound is closing by second intention. A very noticeable scar does not remain.

General supportive treatment is indicated. Five per cent (5%) glucose in saline intravenously, hypodermoclysis, and proctoclysis are beneficial. High caloric liquid feedings given through a nasal catheter which has been inserted in the esophagus may be necessary in some cases when the patient is unable to swallow. Small doses of codeine (gr. ¼) to control restlessness are indicated. Large doses should be avoided so that the cough reflex will not be abolished. Small doses of atropine (gr. 1/150) every four (4) hours aid in depressing the excessive production of saliva and adds to the comfort of the patient. Patients are more comfortable when in a semi-recumbent position. If respiration becomes difficult and one is satisfied that it is not due to pneumonia then a tracheotomy (low) should be performed. When the cases are treated early a tracheotomy will seldom be necessary.

When the patient sleeps, he or she should be placed on the side rather than in the supine position to lessen the tendency toward aspiration pneumonia. Oral antiseptics should be used frequently. Postassium permanganate 1-5000 is effective in overcoming the foul odor emanating from the mouth.

There are some cases wherein the swelling is more one-sided than the other, especially back in the region of the submaxillary salivary gland. In these cases, in addition to making the median incision and establishing drainage up into the floor of the mouth, we make a transverse incision extending backward from the lower part of the median incision. Backward over the anterior belly of the digastric muscle. A hemostat is carried upward and backward toward the submaxillary salivary gland. Occasionally a suppurating lymph node will be encountered. A drainage tube is then inserted. This procedure may be repeated on both sides if necessary. Blair recommends cutting the anterior belly of the digastric and mylohyoid muscles when the transverse incision is made. We have done this on several occasions but it leaves a hideous-looking neck afterward and we are not convinced that it is necessary because in recent cases we have carried out the plan aforementioned without a mortality.

It must not be construed that every septic induration of the floor of the mouth need be treated as described. For when the induration is entirely above the mylohyoid muscle intra-oral incision is usually sufficient. But when the induration involves the floor of the mouth and the front of the neck, a typical Ludwig's angina, the treatment recommended should be carried out, for the lives of many of these patients will be saved.

We have observed two patients die with Ludwig's angina, one in about two weeks, the other in about three weeks. Both deaths were due, we believe, to watchful waiting and masterly inactivity.

AN OMISSION

The author of the article on "Malignant Neutropenia; Case Report" which appeared in this Journal for September, 1935, on page 630, wishes to acknowledge that the case therein reported is from the Departments of Medicine and Pathology at the University of Illinois, Chicago.

PRESIDENT CARTER SPEAKS

An address on "Organized Medicine" will be presented by President Ralph M. Carter of the State Medical Society of Wisconsin before the convocation of students and faculty of Marquette University School of Medicine on December 13th. The convocation is to be held in the Auditorium of the Medical School Building at 11:00 Friday morning, December 13th.

On noon of the same day, President Carter will address the Auxiliary of the Medical Society of Milwaukee County. This meeting will celebrate the fourth anniversary of the establishment of the Auxiliary in Milwaukee County and officers of the State and County Medical Society will attend the meeting as guests of the Auxiliary.

The Importance of Prenatal Care

By AMY LOUISE HUNTER, M. D.
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IN THE past few years it has repeatedly been demonstrated that the relatively high maternal mortality rates of the United States, which have become a matter of concern to interested groups, could be markedly reduced if every expectant mother had adequate prenatal care. In spite of advances which have been made in every other phase of medicine our maternal deaths have not decreased as they should.

In the United States for the five-year period ending December, 1933, over 70,000 women lost their lives from causes associated with childbirth. A study comparing the United States with sixteen foreign countries showed that only one of the group, Scotland, had a higher rate than the United States. There were some differences among the countries in assigning deaths to the puerperal state, but even when the method of the country assigning the smallest proportion of deaths to the puerperal state was applied to all the countries and the United States there were only four countries whose rates were higher than ours.

Wisconsin has advanced beyond many of the states by consistently mantaining a rate slightly below the average for the United States. The rate, however, is more than double that which it has been shown could be reached with groups of mothers who were given early and adequate prenatal care. In the past five years 1,212 mothers lost their lives in Wisconsin from causes associated with pregnancy and childbirth. The following table will show how these puerperal deaths were distributed:

Cause of Puerperal Deaths	1930		1931		1932		1933		1934		Total	
	No.	Rate[1]	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
All causes	298	52.6	238	43.7	225	42.2	236	46.8	215	40.8	1,212	45.5
Accidents of pregnancy[2]	31	5.5	18	3.3	22	4.1	24	4.8	20	3.8	115	4.3
Puerperal hemorrhage	40	7.1	33	6.0	34	6.4	41	8.1	27	5.1	175	6.6
Other accidents of labor[3]	65	11.5	49	9.0	59	11.1	52	10.3	49	9.3	274	10.3
Puerperal septicemia	99	17.5	91	16.7	76	14.3	77	15.3	81	15.4	424	15.9
Puerperal albuminuria and convulsions	61	10.8	46	8.4	32	6.0	40	7.9	37	7.0	216	8.1
All other causes	2	0.35	1	0.18	2	0.37	2	0.39	1	0.19	8	0.3

Note: [1] All rates on basis of 10,000 live births.
[2] "Accidents of pregnancy" includes abortions without mention of septic conditions; ectopic gestation; other accidents of pregnancy; other toxemias of pregnancy.
[3] "Other accidents of labor" include puerperal phlegmasia alba dolens; embolus; sudden death; other accidents of childbirth.

The large number of maternal deaths has become a matter of concern to the medical profession, so that in the past few years numerous studies have been made to try to determine the cause for these high rates. From all of these studies the important point has been emphasized that deaths occurred far more frequently among those women who had not had prenatal care or where the prenatal care had been inadequate. The reasons for lack of adequate care were failure, often because of ignorance on the part of women to go to their physicians; and failure on the part of physicians to make adequate examinations and to do routine urinalyses, and blood pressure determina-

tions. In some cases contracted pelves were overlooked and the significance of warning signals was not recognized. Again, the demand for shorter labors resulted in unnecessary operative interference which was in many cases disastrous. The choice of operation was not always wise; the time of operation was not well planned, especially when resorted to after too long a trial labor. Caesarean sections were done on potentially infected persons, that is, after membranes had ruptured and birth through the normal route had been attempted. Proper asepsis was not always maintained. Hospital standards were inadequate. Rooms used for general operative purposes were used for delivery rooms, thus offering opportunity for infection.

It is essential in a program for saving maternal lives that the expectant parents, both mother and father, must understand the importance of prenatal care. Physicians must educate their clientele to understand the importance of such care and urge all expectant mothers to report to them early an expected pregnancy, and to routinely report at frequent intervals thereafter. A most important function of the Bureau of Child Welfare in the State Board of Health is to help the physician in educating all expectant mothers to make contact with their physicians early, and to know the importance of constant supervision throughout pregnancy. Much can be accomplished if every expectant mother will place herself early in the hands of her physician.

The result of a study of patients at the Maternity Center in New York City showed that where adequate prenatal care was given and necessary precautions taken at the time of delivery, the maternal deaths were reduced to 2.2 per 1,000 live births. This is a far lower rate than Wisconsin's has ever been, but it should not be impossible to attain if adequate prenatal care is given.

A few years ago, at the request of the Children's Bureau, U. S. Department of Labor, a committee, composed of outstanding medical men from various parts of the United States, after much study and deliberation, drew up the following standards of prenatal care which are now widely used.

STANDARDS OF PRENATAL CARE

Prenatal care is that part of maternal care which has as its object the complete supervision of the pregnant woman in order to preserve the happiness, health, and life of the mother and child. Therefore all pregnant women should be under medical supervision during their entire pregnancy, for it is only by careful routine prenatal care that pregnancy and labor can be made safer.

I. The physician at the first visit should obtain the following data and record the facts:

A. Patient's past history—
  1. Diseases. Question particularly as to the following:
     (a) Tuberculosis or exposure to tuberculosis.
     (b) Scarlet fever.
     (c) Tonsillitis.
     (d) Rheumatism.
     (e) Diphtheria.
  2. Surgical conditions and accidents, especially abdominal and pelvic operations.
  3. Menstrual history—cycle, amount of flow, duration, and pain.

B. Character of previous pregnancies and labors. Secure the following data of previous pregnancies in chronological order:
  1. Date of termination.
  2. Period of gestation.
  3. Complications during pregnancy.
  4. Labor.
     Onset—spontaneous or induced.
     Character.
     Duration.
     Termination of labor.
       Spontaneous or artificial.
       If artificial, what method.
     Other complications.
  5. Puerperium.
     Infection.
     Hemorrhage.
     Operations following.
  6. The newborn.
     Alive or dead at birth.
     If dead, macerated?
     Premature or term.
     Breast fed—yes or no. Duration.
     Baby alive now? If dead, give cause of death.

C. Present pregnancy:
  1. Date of last menstruation and character thereof.
  2. Nausea and vomiting and quickening.
  3. Estimation of date of delivery.

II. Then proceed to—

A. Physical examination.
  1. Taking and recording of the systolic and diastolic blood pressure, temperature (preferably p. m.), pulse, and weight.
  2. Skin, nutrition, head, mouth, neck, chest, heart, lungs, breasts, extremities.

3. Abdominal examination, palpation, auscultation, mensuration.
4. Vaginal examination. No vaginal examination during the last month of normal gestation without strict aseptic precautions. Rectal examination should be substituted.
   (a) The necessity of a vaginal or rectal examination is insisted upon—
      (1) To determine the existence of a pregnancy.
      (2) To determine the position of the uterus.
      (3) To discover any pelvic tumor.
      (4) To determine the presence of venereal disease, and if suspected to take smears.
      (5) Speculum examination of the cervix and vagina is advised in early pregnancy if indicated.
   (b) In presence of vaginal bleeding at any period of gestation only rectal or aseptic vaginal examination should be made.
5. Pelvic measurements.
   (a) Intercristal.
   (b) Interspinous.
   (c) External conjugate.
   (d) Diagonal conjugate.
   (e) Transverse diameter of the outlet.
   (f) Palpation of pelvic contours, promontory, sacrum, coccyx, ischial spines, arch, tuberosities.
6. Taking of blood for Wassermann reaction and hemoglobin test.
7. Urinalysis.
   Specific gravity. Albumin. Sugar.
   A microscopic examination of the sediment is advisable as a matter of routine, and it is a necessity if albumin is present. If there is any evidence of trouble, a 24-hour specimen should be secured.

III. If pregnancy is determined, then give minute instructions to the patient in the hygiene of pregnancy.

A. Diet.
B. Exercise, rest, sleep, and recreation.
C. Clothing, including shoes.
D. Baths and care of the skin.
E. Care of the bowels.
F. Care of the kidneys.
G. Care of the teeth.
H. Care of the breasts.
I. Intercourse during pregnancy.
J. Maternal impressions.
K. Hygiene of the home and preparation for home delivery.
L. Mental hygiene.

Patient should be examined by a physician at least once a month during the first six months, then every two weeks or oftener as indicated, preferably every week in the last four weeks. A properly qualified nurse working in conjunction with a physician may assist in the observation of the patient. At each visit to the physician the patient's general condition must be investigated, blood pressure taken and recorded, urinalysis done, pulse and temperature recorded, and the weight of the patient taken if possible.

External pelvimetry is only suggestive. It alone does not determine whether any disproportion is present. Abdominal examination should be made at each visit and the height of the fundus determined at this examination. Abdominal palpation in the eighth and ninth months will show whether or not there is any obvious disproportion between the head and the pelvis. Malpositions can be determined and may be corrected. Further information as regards descent and fixation can be obtained by rectal examination.

In a primigravida, if the presenting part two weeks before the estimated date of delivery is not well in the pelvis, the physician in charge should determine, so far as is possible, whether any disproportion between the pelvis and the baby exists. If a disproportion is diagnosed in any case special care should be taken to avoid vaginal examinations immediately prior to or after the onset of labor. This precaution is wise because of the danger of serious infection should operative procedures later become necessary.

Every patient requires careful individual study. If the prospective labor offers a probable chance of being a difficult one, the patient should be sent to a well-equipped hospital for delivery.

Pregnancy is a physiological condition, but there is no condition which so quickly may become pathological. It is therefore necessary to instruct each patient at her first visit to report at once to the physician anything that may affect her well-being, especially the following symptoms:

1. Obstinate constipation.
2. Shortness of breath.
3. Acute illnesses, especially colds, sore throat, and persistent cough.
4. Persistent or recurring headache.
5. Recurring nausea or vomiting.
6. Visual disturbances.
7. Dizziness.
8. Pain in the epigastrium.
9. Edema, especially of face, hands, and ankles.
10. Changes in the urine or in the type of micturition.
11. Severe pain in the lower abdomen.
12. Vaginal bleeding, even the slightest.

In case of vaginal bleeding or low abdominal pain, the patient must be instructed to go to bed at once and to send for her physician. When bleeding from the vagina occurs its source must be determined by examination. When hemorrhage appears imminent

the patient, if possible, should be removed to a hospital, but if vaginal examination is necessary it must be done under aseptic precautions. Where a hospital is not available, means must be at hand to control the possible severe bleeding that may arise.

If the patient develops a toxemia in the course of her pregnancy it is only by careful medical supervision and treatment that an eclamptic condition can be prevented. Eclamptic convulsions are in the majority of cases preventable, but only by constant vigilance combined with cooperation between the patient and the physician can the disastrous results which occur throughout the country be diminished.

If the patient is to be delivered by a licensed midwife, she should have the advantage of the same prenatal care to which all prospective mothers are entitled. If there is doubt about the patient's having a normal delivery she should be transferred to a doctor or to a hospital.

Only by careful study of each case is it possible to determine whether the patient should be allowed to stay at home or be sent to a hospital. By this individual study the number of vaginal examinations during labor may be cut to the minimum and the terrible toll of death from sepsis be much lowered.

It is only by the early and repeated examination of the prospective mother that the premature termination of pregnancies, the stillbirths, and many diseases and deaths of the newborn can be reduced. By the same methods the mothers can be spared much distress and disease, and many lives can be saved which would otherwise be lost from toxemia, accidents of pregnancy and labor, and infection.

1934—U. S. Dept. of Labor, Bureau Publication No. 153.

Prenatal literature is available to all residents of the state through the Bureau of Child Welfare. In this way the Bureau helps to educate the public to make more use of the family physician. Many physicians use this service, by keeping supplies on hand in their offices or by sending the names of patients to whom they wish literature sent, to the Bureau of Child Welfare, State Board of Health, Madison, Wisconsin. This literature includes prenatal letters and the U. S. Children's Bureau publications—No. 4, "Prenatal Care"; Folder No. 1, "Minimum Standards of Prenatal Care" (for mothers); and Folder No. 4, "What Builds Babies." A complete list of all literature available through the Bureau is:

Prenatal Letters
Prenatal Care
Minimum Standards of Prenatal Care
What Builds Babies
Maternity Belt Pattern
Layette Pattern
Infant Care
Diet Cards, 1, 2, 3, 4
Breast Feeding
Sunlight for Babies
Sun Bath Schedule
Keeping the Well Baby Well
Out of Babyhood into Childhood
Child from One to Six
What to Feed the Children
Why Drink Milk
Child Management
Why Sleep
Care of the Teeth
Care of the Eyes
Tonsils and Adenoids
Prevention of Goiter
Prevention of Diphtheria
Smallpox Vaccination
Communicable Disease Chart
Height-Weight-Age Tables
Infants
Children
Constipation Diet—Children
Enuresis
Is Your Child's Birth Recorded?

As soon as the birth of a first child in any family in Wisconsin is registered, a copy of "Infant Care" and a list of all available literature is sent to the home.

Recent Methods in Prevention of Disease; Critical Review

By A. B. SCHWARTZ, M. D.
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"WHATEVER benefits," said Sir George Newman in his lectures on Preventive Medicine, "we may reasonably expect from organized public health services under the auspices of the State . . . . . the real outpost, the pivot, the interpreter, the exponent of preventive medicine is the medical practitioner."

As scientific discovery goes swiftly on, the medical man in the role of interpreter of preventive medicine must be particularly wise. He must mingle his zeal to prevent disease with a proper leaven of science. The public is always agog for novelties of medical therapy. In the treatment of disease, a good deal of empiricism prevails. One drives the demons out with salicylates, another by kneading the spine, a third by incantations in which a sacred cow assumes the burden. Disease being self-limited, each therapist oc-

casionally records cures unrelated to his ministrations.

In the prevention of disease, such accidental results of empiricism lose their significance. The method selected to prevent a disease must prevent it today and tomorrow, on sunny as well as cloudy days.

"Performance," that word by which the automobile manufacturer conjures the trade, when related to preventive medicine must be proved not by one group of engineers. It must withstand the critical tests of every laboratory, of every hospital group, of every private physician. There must be no question of doubt as to "performance" when a particular method is accepted for general practice in preventive medicine.

SMALLPOX

Vaccination against smallpox has rightly been called "the most important discovery ever made in medicine." The manner of its introduction may well remain an example for all scientific announcement. "To those who must needs rush into print with hasty conclusions drawn from a few ill-digested cases, Jenner may well serve as an exemplar and an ideal," says Still in describing the discovery of vaccination. When Jenner wrote Hunter the story of the Gloucestershire dairymaids and their immunity to smallpox, Hunter replied, "Do not think, try, be patient, be accurate." After 23 years of thoughtful observation, Edward Jenner first published his "Inquiry into the Causes and Effects of the Variolae Vaccinae."

Since that time calf lymph has been the source of the virus used in vaccination. Most promising discovery in this field has been the successful growth of a potent vaccine virus on chick embryo membranes. Announced by Goodpasture and his associates at Vanderbilt University, the material has been tested on human subjects. Typical vaccinia lesions develop in the regular manner. The lesions are said to be milder than those obtained with calf virus.

This constitutes the second departure from the method originally used in smallpox vaccination. The first may well be mentioned again; namely, the demonstration by the United States Public Health Service several years ago that air-tight dressings increased the possibility of infection. Vaccinations are now left uncovered. Shields are particularly condemned.

The frequent question raised as to what interval should elapse between vaccinations has been answered by Dearing and Rosenau. The traditional belief that vaccination is good for only seven years is disproved by their investigation. Over a period of three years, among 400 students vaccinated there were only five primary takes, two of these were in students who had had smallpox in childhood but had never been vaccinated. Of the remaining three, one reported four prior unsuccessful operations, one had been vaccinated over 20 years previously, and the third had been vaccinated only two years before. 395 students who had been vaccinated as far back as early childhood were still immune at college age.

Revaccination is, however, required by numerous schools and colleges on the grounds that revaccination increases protection and, that even if there is a take, the revaccination is a milder experience.

Donnaly advocates vaccination against smallpox in the newborn. Inasmuch as the number of takes is not as high, it seems more feasible to vaccinate some time between the ages of six months and one year. Vaccinations in infants are rarely accompanied by any reactions.

DIPHTHERIA

The diphtheria mortality rates collected by the American Medical Association continue to show the response to the immunization program now universally practiced in the United States. The total diphtheria death rates for 88 cities for the period 1923-1934 are shown in Table I. For the past 5 years, remarkable decreases have been recorded in most cities. Grouped by sections, the East North Central States, which includes Wisconsin, show a decrease of 33% in the period 1930–1934 over that of 1925-1929.

The success of the immunization program carried on by the medical profession in the United States is again attested to by a comparison of the diphtheria death rates re-

Table 1

TOTAL DIPHTHERIA DEATH RATES FOR EIGHTY-EIGHT CITIES
1923–1934

	Population	Diphtheria Deaths	Diphtheria Death Rate per 100,000 Population
1923	31,060,848	4,078	13.13
1924	31,722,841	3,439	10.84
1925	32,384,834	3,133	9.67
1926	33,046,827	3,106	9.40
1927	33,708,820	3,493	10.36
1928	34,370,813	3,176	9.24
1929	35,032,806	2,738	7.82
1930	35,694,802	1,827	5.12
1931	36,503,412	1,366	3.74
1932	37,084,712	1,191	3.21
1933	37,084,712	861	2.32
1934	36,777,112	821	2.23

ported by the Health Section of the Secretariat of the League of Nations. According to this report, the diphtheria mortality per hundred thousand of population in groups of large cities is as shown in Table 2.

The complete eradication of the disease now depends on the successful immunization of the pre-school child. The Medical Research Council's report indicates that incomplete immunization in a given community may be followed by an increase in the numbers of cases of diphtheria. Active immunization as now practiced tends to increase carrier infection. In case then, the unprotected population is greater than the protected population, there is danger of a serious diphtheria epidemic. Every preschool child should therefore be immunized. Parents frequently mention that inasmuch as their school children are immunized, they feel safe about the smaller children who are at home. This contention is based on a fallacy and provides a false feeling of security. Every opportunity should be taken by the family physician to warn against this attitude.

Schorer, reviewing the problem in Kansas City, emphasizes the fact that *"Lay organizations cannot solve diphtheria immunization. It is a medical problem to be solved by the doctor."*

The simplification of diphtheria immunization should prove an impetus to universal immunization. Ramon increased the potency

Table 2

DIPHTHERIA MORTALITY PER HUNDRED THOUSAND OF POPULATION IN GROUPS OF LARGE CITIES

	1928	1929	1930	1931	1932	1933
51 German towns	8.4	10.6	11.7	7.1	5.6	8.0
118 English towns	9.7	9.4	10.2	7.7	6.9	8.2
16 Scottish towns	12.2	11.5	11.5	8.5	8.6	7.2
88 U. S. cities	9.2	7.8	5.1	3.7	3.2	2.3
28 U. S. states	---	6.4	4.6	4.1	3.8	2.9

of toxoid, thus reducing the number of injections to two. One month after the second injection 99.5% of the children immunized are immune to diphtheria. A colleague of Ramon's has further demonstrated that it is possible to immunize simultaneously against diphtheria and typhoid fever, which fact has been confirmed by Ramon.

Besides the possibility of immunizing against diphtheria and typhoid at the same time, there is also the possibility of immunizing against diphtheria and smallpox. Dr. Stern, health officer of West Allis, reported to the Milwaukee Pediatric Society that in 100 children, simultaneously immunized against smallpox and diphtheria, 95% became immune to diphtheria, 98% to smallpox.

The one dose alum toxoid method of diphtheria immunization promises to displace all other methods of immunization against this disease. Producing about 95% immunes, the method appears to be the one most practical for universal application. The only objection to its use has been the swelling or lump that remains at the point of injection for several weeks. On account of these reactions many private practitioners still prefer the two dose method which in young children rarely gives any reactions.

A committee of the American Public Health Association recommends the following procedures for standard usage:

"A. Infants at 6 months: Alum-precipitated toxoid. One dose of 1 c.c., without prior or subsequent Schick testing. Minimum of reactions and maximum per cent of active immunization produced.

"B. Children from 6 months to 6 years of age: Same procedure as in A. Reactions slightly increasing with age but unimportant.

"C. Children 6 years of age and over, and adults, known to be susceptible to diphtheria: Fresh and adequately toxic toxin-antitoxin mixture in three 1 c.c. doses at intervals of 2 weeks, followed by a Schick test, at the end of 6 months to determine presence or absence of immunity, with a second series of inoculations for those still showing a positive Schick reaction whose occupation exposes them to particular hazard of infection."

In order to simplify administration this committee also suggests the elimination of routine Schick testing in infants or children between 6 months and 6 years of age either before or after the use of the single dose of alum-precipitated toxoid, except for epidemiological purposes or to determine the immunizing effectiveness of a preparation not previously used.

MEASLES

New reports confirm the value of convalescent human serum in the prevention or modification of measles. Serum given within four days of exposure usually prevents measles. That given later usually modifies the disease. In the case of a tiny infant, the practitioner may want to prevent the disease entirely. In the case of an older child, it may be wiser preventive medicine to modify the disease. The modified disease will provide an immunity not acquired through the immunizing procedure. Where convalescent measles serum is not available, normal adult serum is also effective.

Schick and Kareltiz corroborating the value of convalescent serum in the prevention or modification of measles interpret certain epidemiologic factors which have to do with the results obtained. In homes, where the exposure is greater than in a hospital ward, larger doses of serum are necessary. The repeated exposures of the home environment multiply the possibilities of contracting the disease. An interesting observation made by them, too, is that the immune antisubstances in adult blood are increased by repeated exposure to the disease, thus making such adults more effective donors of blood for measles prevention.

Though additional reports confirm the promising value of placental extracts (immune globulin of McKhann) as an immunizing agent in measles, the Council of the American Medical Association believes that more evidence is needed before it may be generally used by the medical profession. The Council bases its objections particularly on the lack of adequate standards, on the uncertainty regarding dosage, and on the occurrence of reactions occasionally following the use of immune globulin. Experiences with this material at the Isolation Hospital in Milwaukee have been discouraging. The material was used in 100 instances. Local reactions varied from areas of redness to severe cellulitis. Constitutional reactions were frequently observed. Immunization was not always successful even when the globulin was given early. In some instances receiving the material, the intensity of the measles rash seemed aggravated.

An interesting development in the preparation of human serum, one which may play quite a part in contagious disease prophylaxis, is the use of human serum dried in vacuum (lyophile serum) reported by Stokes of Philadelphia. Serum collected in this way may be stored for long periods of time. Pooled adult serum and convalescent measles serum thus processed was injected into 129 children who had been exposed to measles. Sixty-six showed an attenuated form of the disease, which is usually desired; 63 were completely protected, while three came down with the disease.

WHOOPING COUGH

Sauer's results in the active immunization of children against whooping cough by the use of a specially prepared vaccine continues the most favorable yet reported in the prevention of this disease. According to Sauer, good results depend not only on the proper interval between injection and exposure (it must be given at least four months prior to exposure) but on a potent vaccine administered in the dosage and intervals suggested. In a recent summary of results, Sauer reports that among 3,746 children injected, of whom 344 were later exposed to whooping cough, 19 developed the disease; 93% were protected.

Others have reported favorable results by the use of Frawley's Undenatured Antigen. In those not completely protected, a milder form of the disease occurs in the immunized children. Frawley's vaccine has also been advised as an immunizing agent for those recently exposed to the disease.

POLIOMYELITIS

The continued recurrence of poliomyelitis in epidemic form every summer has served as a stimulus to newer investigations. Reports on the use of convalescent serum for protection are still in the controversial state. Some regard as inconclusive Brebner's report in 1932 in which he claimed that 1,300 children given whole adult blood remained free of poliomyelitis, while 32 cases developed among 3,000 children not given the serum. The results obtained in the prevention of paralysis by use of convalescent serum in pre-paralytic cases are still unconvincing. In a recent report by Fischer of the use of human convalescent serum in pre-paralytic poliomyelitis—a comparison of 447 treated and 102 control patients in New York City, he says, "The outcome for the treated patients was no better, if as good, as for the untreated ones." Harmon in a critical analysis of the subject says, "Notwithstanding the total failure of statistical presentations to favor certain types of serums, clinical observations that have been almost universally made of rapid symptomatic response to the administration of serum by an immediate drop in temperature and marked improvement in symptoms cannot be totally disregarded." An editorial comment expressed a year ago in the Journal of the A. M. A. is perhaps still pertinent. "More data and observation are needed before the final opinion can be given as to the value of serum treatment and prophylaxis in poliomyelitis."

The promise of successful active immunization in poliomyelitis seems imminent in the report of the work now being carried on by Brodie and Park. Brodie's vaccine consists of a suspension of the spinal cords of monkeys injected with poliomyelitis inactivated with 0.1% solution of formaldehyde for from eight to sixteen hours at incubator temperature. One or two doses of vaccine are given. The antibody to poliomyelitis seems to develop within eight days. The duration of the immunity is not known. Brodie has been able to show antibodies in a vaccinated person after eight months. While at the time of Brodie's report, over 1,500 children had been vaccinated, he advises that it will take observations during an epidemic to determine its value.

Kolmer's vaccine, an attenuated poliomyelitis virus containing a 4% suspension of monkey spinal cord in a 1% sterile sodium ricinoleate solution has been used by him in several hundred children. Kolmer's vaccine contains attenuated living virus which has provoked the question of its absolute safety. Kolmer believes that it is safe. Kramer, at a round table discussion of the American Academy of Pediatrics, expressed the opinion that there may be some danger in the use of unmodified virus as recommended by Kolmer.

SCARLET FEVER

Widespread epidemics of scarlet fever during 1934 made possible the accumulation of new evidence on the efficiency of scarlet fever immunization by the Dick procedure. Henry regards the successful result obtained by the Philadelphia Health Department a direct challenge to the medical profession. Henry reports two chief objections raised by the profession: first, that the Dick toxin only masks the symptomatology by immunizing the subject against certain signs such as the rash; second, the reactions are too severe to warrant its universal adoption. Up to March, 1935, 10,057 children had been given a Dick test and those showing a positive test were immunized. Of these, 4,053 were children living in institutions and 6,004 were from private homes. Of the institutional group 25% had positive Dick tests. Of the children not living in institutions 58% had positive Dick tests. No case of scarlet fever developed in any of the immunized institutional children. Three cases of scarlet fever developed among the immunized children of the home group. Henry maintains that only a small number of children (4.2% of 790 cases studied) have severe reactions, "consisting of nausea, vomiting, fever sometimes as high as 103° F., sometimes scar-

latinal rash, sore throat, and pain in the joints and abdomen." . . . . "Usually not all this rather formidable array of symptoms appeared in any one child." The most severe symptoms seldom lasted over 24 hours. Rest in bed and light diet after the injections modified the severity of the reaction.

Dr. Koehler, the health officer of Milwaukee, regards scarlet fever immunization as successfully established by Milwaukee's experience. During 1934 and 1935 (to July 1, 1935) there were 10,505 cases of scarlet fever in Milwaukee, a rate incidence of about 60 per 1,000 in Milwaukee's school population. Six thousand children were immunized with five doses of Dick toxin. Of these, 14 children developed scarlet fever, a rate incidence of 2.7 per 1,000.

Platou reports the successful immunization of 164 nurses who had positive Dick tests. No cases of scarlet fever occurred in this group in four years. Of 150 nurses not immunized, eight nurses developed scarlet fever. Platou summarizes the results of numerous reporters, an aggregate of 20,000 persons who have received Dick toxin for immunization, and draws the following conclusion, "It would seem from the evidence available to date that graduated doses of pure scarlet fever toxin administered to the point of a negative Dick test are warranted in spite of certain objections which operate to prevent their widespread use. The practice of immunization against scarlet fever for the prevention of institutional epidemics seems particularly valuable."

Toomey, with a considerable experience in contagious disease prevention, presents the conservative medical viewpoint in a discussion of the Philadelphia experience. Toomey regards the occasional occurrence of severe reactions as an argument against its use in practice. The type of scarlet fever present in the United States is not severe enough to warrant so drastic an immunization procedure as a general health measure. Other objections voiced by Toomey are the occasional failures of immunization to protect against the disease and the unknown duration of the immunity conferred.

Friedman and Esserman report the attempted immunization against scarlet fever by administering Dick toxin intranasally. They were only partially successful. Coinciding with the impression held by many medical men who apply the Dick test are the following observations made by these authors: "It was somewhat disconcerting to find a negative reactor with the same technic and toxin, yielding four days later a positive reaction. We were especially chagrined to witness the devolpment of scarlet fever in two of our negative reactors. Similar experiences encountered and commented upon by other observers clearly indicate that within certain limits and happily in but few individuals, the degree of immunity to scarlet fever as reflected by the intensity of the Dick reaction is subject to rather wide fluctuations."

The Dicks refute the claims made by proponents of a scarlet fever toxoid. Their investigations indicate that there is no scarlet fever toxoid analogous to diphtheria toxoid. Good results reported by several observers working with an alleged toxoid are, according to the Dicks, due to the presence of unaltered toxin in the formalized preparation.

CONVALESCENT SERUM

The experience of the Chicago Serum Center in producing temporary immunity against scarlet fever in actual contacts by the use of convalescent serum is noteworthy. In over 800 instances of home contacts given prophylactic injections of from 10 to 20 c.c. of convalescent scarlet fever serum less than 3% developed the disease. Of 85 institutionalized children who were Dick positive, similarly treated after exposure, only 5% developed the disease.

The Milwaukee Serum Center, in operation less than a year, distributed 136 doses of convalescent scarlet fever serum for prophylactic purposes. No case of scarlet fever developed in any one of those injected. The immunity produced by convalescent scarlet fever serum is good for only 10 days to 2 weeks. Its practical advantages to the private practitioner are that the contact subjects may be immediately protected, and plans made for segregation from the infected locality. In the transfer of such a contact, throat cultures indicating the ab-

sence of hemolytic streptococci are done in order to be sure that the contact is not a carrier. If the contact remains in close proximity to the scarlet fever patient, repeated injections of the prophylactic dose are given every 10 days. Inasmuch as the material is human serum, these doses cause no reactions.

The reduction of the number of complications following scarlet fever may well be regarded as an interest of preventive medicine. It is for this reason important to record the successful results of treatment of scarlet fever by the use of convalescent scarlet fever serum. Not only are the results obtained with large doses given early among the most spectacular seen in medical practice but the number of crippling complications are materially reduced. Thalhimer compares the complications which occurred in a series of over 800 severely ill patients treated with convalescent scarlet fever serum with the complications observed in 6,000 mild or moderately ill patients seen in the same hospital during the same time. The severely ill patients receiving convalescent serum had less than half as many complications. For example, nephritis developed in 3.5% of the milder group not receiving serum, in 0.7% of the severely ill group receiving serum.

TUBERCULOSIS

Guerin, before the French Academy of Medicine, reviews the experimental evidence for the efficacy of B C G vaccine. Every allergic animal becomes resistant to superadded tuberculous infection. If two cows are tuberculin tested, and one is positive to the test, after which each is inoculated with a culture of virulent tubercle bacilli, the tuberculin positive cow shows no ill effects; the other cow succumbs to miliary tuberculosis. One can expect, believes Guerin, the same results in allergic human beings. He further claims that no ill effects follow the use of the vaccine. The mortality from all causes of infants under 12 months is one-half less in those who have been vaccinated with B C G. He warns that newborn infants so vaccinated must be removed for a period of at least six weeks from contact with tuberculous individuals.

Kereszturi, Park and his associates report on the fate of children vaccinated with B C G. "Judging from the gross analysis of our total group of over 1,000 children, vaccination with B C G not only is harmless but apparently decreases the mortality due to tuberculosis." Park advocates B C G for infants and older children who have a negative Mantoux test and are to be exposed to infection.

Stewart and Myers regard allergy as a liability, and therefore maintain that vaccination with B C G is apt to increase susceptibility to tuberculosis. Myers warns against further use of the vaccine until 25 years have elapsed, giving time to see what happens to the million or more infants and children who have already been vaccinated with B C G.

Schick, discussing Stewart's ideas before the Academy of Pediatrics, believes that "the beneficial effects of allergy will outweigh the detrimental part of hyperergic reactivity."

Wallgren, as guest speaker before the Children's Section of the American Medical Association in 1934, exhibited charts showing a declining rate from tuberculosis in infants which he ascribed to a carefully carried out preventive program and the use of B C G vaccination. Wallgren also believes that the death rate of tuberculous meningitis, an altogether hopeless complication, could be reduced by early diagnosis of the primary tuberculous infection.

MENINGOCOCCUS MENINGITIS

Hoyne gives a favorable report with the use of the new antitoxin as prepared by Ferry in the treatment of meningococcic meningitis, and Ferry also demonstrates the possibility of producing active immunity against the disease with successive doses of meningococcus toxin.

MUMPS

Several observers report the successful use of convalescent human serum in the prevention of mumps. Though mumps is generally regarded as being too mild to warrant preventive measures, there are occasions

when the prophylactic use of serum is advisable. In such instances, human serum is an effective agent.

CONCLUSIONS

Though final judgment can not be passed on some of the procedures advocated for the prevention of certain diseases, it is possible to apprehend certain trends in practice.

The proofs that the incidence of smallpox is related to the number of unvaccinated persons may be read in the mortality tables of every civilized nation. There were over 800 cases of smallpox in Wisconsin in 1934. Most of these cases occurred in communities with a large unvaccinated population.

Wisconsin's smallpox rate is exceedingly high and constitutes a challenge to the entire profession in this state.

Immunization against diphtheria has become a standard procedure and should evenually eradicate this disease. It is important for every physician to immunize every preschool child under his care.

The use of convalescent human serum is a dependable procedure in the prevention of measles. It may also be used to prevent mumps and for the temporary immunization of scarlet fever contacts.

The use of Sauer's vaccine in whooping cough, while still in the experimental stage, gives promise of being the most effective vaccine yet available for the prevention of this disease.

The efficacy of Dick toxin in immunization against scarlet fever is advocated by all those who have used it on a large scale. In controlling institutional epidemics, it has unquestioned value. The number of injections necessary, the occasional reactions, and the unknown duration of immunity will militate for some time against its universal adoption in private practice.

The use of B C G in tuberculosis control seems more suitable for use in large centers, under carefully controlled direction. It is not likely to become a routine procedure of the private physician.

The results of both Brodie's and Kolmer's measures for the prevention of poliomyelitis will be more easily defined after they have been tried out in epidemic areas. It seems worth while for the present to use either adult or convalescent serum in lesser epidemic areas, for selected individuals.

The Diabetic as a Surgical Risk*

By E. M. JORDAN, M. D.
Green Bay

UNTIL the dawn of the insulin era only fourteen years ago, the surgical diabetic was one of the most serious problems in medicine, and today surgery is one of the most serious complications of diabetes. However, the incidence of surgery in diabetes is rapidly increasing due to (1) better diagnostic methods and (2) to the fact that diabetics, particularly the juvenile type, are living much longer. The morbidity of surgery in diabetes has rapidly fallen in the last decade but the death rate is still higher than that of non-diabetics with comparable surgical conditions. Joslin reports a 14% mortality in skin infections and amputations in contrast to 6.8% for the remaining surgical conditions. The lowest death rate was reported by Judd and Adams from the Mayo Clinic. In 304 major operations the mortality was 3%. However, there were only fifteen cases of gangrene and no carbuncles in this series, and this probably explains their fewer fatalities.

The elements which hinder success in diabetic surgery are easily summarized, (1) poorly selected and improperly given anaesthesia and (2) the restriction of carbohydrate just before operation and (3) the failure to follow the diabetes closely after operation. Contrary to the opinion of most surgeons it is doubtful if the liability to infection of diabetic tissues is ever much of a factor. Given a septic wound and the diabetes invariably increases, but the modern surgeon has or

* Presented before the 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay.

should have few cases of sepsis. Diabetes does not produce sepsis nor even predispose a patient to infection as far as general surgery is concerned. If this were not true the many thousands of venupunctures and the many thousands of doses of insulin given would certainly result in many infections, but they do not.

Surgical delays in diabetes are dangerous. Infection always makes a diabetic worse. Early diagnosis with operation as soon as it is expedient makes for success in surgery of the diabetic. Remove the infection and treat the diabetes afterward. If the surgical complication is not urgent it is, of course, much safer to have a normal blood sugar and normal urine before operation. The diet should contain fairly liberal amounts of carbohydrate. Insulin, if necessary, should be given in sufficient quantity to utilize all the carbohydrate in the diet so that as much glycogen as possible may be stored in the liver and tissues. In this manner much less harm results from the anaesthetic and the patient has a supply of carbohydrate available when he needs it most. Feeding should begin as soon as possible after operation. Each specimen of urine should be examined for sugar and diacetic acid and the insulin dosage gauged thereby. It is safer and much more effective if insulin is given in small doses every three or four hours than if it is given in two or three large doses. When dealing with infections a rigorous attempt should not be made to keep the urine sugar-free. Clark has shown that wound healing in animals is delayed by protein diets while it is accelerated by adding carbohydrate to the diet.

With the aid of insulin most any type of anaesthesia may be used, but certainly not with impunity. Ether given to normal individuals produces hyperglycemia and acidosis, the latter due to an increased solubility of the fatty substances in the blood. It stops the formation of glycogen in the liver and in the tissues, and finally it upsets the water balance due to the vomiting which usually ensues after ether. A combination of gas-oxygen and ether has produced the best results in diabetic surgery, both from the standpoint of the operator and the minimum amount of ether used.

Today, as in the pre-insulin era, carbuncles are one of the most dreaded complications in the diabetic as the mortality is 25% or more under the best conditions. Carbuncles occur most frequently in the fat diabetic and lack of cleanliness is the most frequent inciting cause. Brigham says "the washed neck, like the watched pot, never boils". Treatment of carbuncles must be both prompt and bold. Free drainage should be established by wide crucial incisions and the cavity packed with gauze saturated with antiseptic solutions. Heat should then be applied.

Gangrene, while it occurs much less frequently than formerly, still accounts for over 3% of the deaths in diabetes. The causes of gangrene are arteriosclerosis, uncleanliness and trauma. If every diabetic kept his feet as clean as his face, gangrene would occur much less frequently. The treatment of gangrene depends upon the condition of each individual case. As a general rule if the gangrene is of the dry type and is not spreading, medical treatment should be instituted in an effort to save the foot. If the gangrene is of the wet type or is rapidly spreading, operation must be promptly advised.

In the diabetic, appendicitis is a dangerous complication because of the difficulty in distinguishing between an abdominal crisis and an impending coma. Incipient coma usually begins with epigastric pain, often nausea and vomiting. The condition may simulate an acute appendix, a ruptured peptic ulcer or an acute gallbladder. The patient may even have fever and leucocytosis. In these cases a blood sugar and the CO_2 combining power of the blood may help to make a diagnosis. If there is much doubt it is much safer to explore the abdomen rather than wait too long as an incipient coma is much more easily controlled than a ruptured appendix or a perforated ulcer. Appendicitis in the diabetic is usually insidious, often symptomless and no patient should be sacrificed to appendicitis because he has diabetes.

In hyperthyroidism, particularly in exophthalmic goiter, surgery again produces excellent results not only for the diseased thyroid but for the diabetes as well. The accelerated metabolism in hyperthyroidism produces a marked reaction on diabetes, lower-

ing the carbohydrate tolerance and producing acidosis by too rapid and incomplete combustion of the body fats and proteins. Surgery in the hyperthyroid diabetic is both a dangerous and exciting game; but a game, if played according to Hoyle, you are pretty sure to win. The rapidly changing picture of thyroid toxicity, diabetic coma, insulin shock in a patient with a fibrillating heart and a non-retentive stomach is likely to produce enough thrills to add a few gray hairs to any surgeon's head.

If one were given the opportunity to choose the type of diabetes he would acquire, he would be wise to choose the gallbladder variety as it is usually the most innocuous and the most responsive to treatment of all the types of diabetes. There is usually a pancreatitis associated with gall stones in the diabetic and the removal of the gallbladder usually improves the tolerance and leaves the patient with a relatively mild diabetes.

SUMMARY

Surgical mortality varies from 22% to 3% due to different types of operations and anaesthetics used. Infection always increases the diabetes but diabetes does not cause infection. Operation should be done as soon as it is expedient. Abdominal crises are dangerous in diabetes as they may simulate coma or vice versa. Surgery produces excellent results in hyperthyroidism not only from the diseased gland but for the diabetes as well. The gall stone type of diabetes is usually mild and responds well to treatment.

Carcinoma of the Testicle; Postoperative Sequelae, Treatment and Comments*

By F. H. KUEGLE, M. D.
Janesville

LATE in the summer of 1926, a man, aged thirty-two, consulted Dr. V. W. Koch for an enlarged and painful left testicle. An indurated tumefaction was noted at the upper pole of the organ that was suggestive of malignancy. However, since the history revealed that the patient earlier in life had had a gonorrheal infection, the case was treated tentatively as one of epididymitis pending further observation. Instead of decreasing in size under appropriate treatment, the tumefaction at the upper pole of the organ increased slowly in size and became more and more indurated. In spite of this fact, consent to remove the testicle was not obtained until August, 1927. Orchidectomy was followed by a prompt and uneventful recovery. Microscopic examination of the tumor by Dr. Stovall revealed this to be a carcinoma.

The following May, the patient returned complaining of left inguinal pain. Clinical examination disclosed the fact that the spermatic cord was edematous and tender; hence, resection of this vessel was deemed advisable. Sections made following removal of the cord and repair of a left inguinal hernia failed to demonstrate malignancy. However, following primary healing of the operative incision, a series of deep x-ray treatments was administered to the entire left inguinal region as a precautionary measure to prevent insofar as possible the formation of an indurated scar which not infrequently predisposes to carcinomatous recurrence. No more trouble was experienced until the fall of 1929 when this man again required medical attention for generalized abdominal pain which was somewhat more severe on the left side. The symptoms present at this time proved to be transitory; hence probably were due to intestinal dysfunction.

About nine months later, in August, 1930, just three years after the orchidectomy, he developed pain in the left groin and had lost some weight though his general health remained good. From this time on his strength and vitality failed very gradually until July, 1931, when he began to complain of severe low back pain. By October he was using a cane, and loss of weight became more marked. An indurated mass was present in the left groin and examination per rectum revealed the presence of a hard, readily palpable tumor in the left pelvis. Deep x-ray therapy was recommended and for the next eighteen months repeated, heavily filtered irradiations at a peak voltage of 200,000 were administered at frequent intervals. These irradia-

* Presented before the 93rd Anniversary Meeting, State Medical Society of Wisconsin, Green Bay, September 1934.

tions were recommended not with any idea of being able to cure the malignant invasion of which he quite evidently was a victim but with the object of relieving pain and the hope of prolonging life.

By the spring of 1933, his back pain could no longer be relieved by x-ray irradiations so that nerve sedatives and opiates were required to alleviate his suffering. Just about this time, "The Chicago Daily Tribune" published a description of a powerful x-ray generator and a new type Coolidge tube which was being installed in one of the Chicago hospitals for the treatment of deep-seated malignancies. Seeing the pictures and reading the account of this new style equipment prompted this man to seek counsel as to the advisability of applying for treatment. He was informed that such a course of treatments might benefit him, but, not wishing to discourage him unnecessarily, he was not told that it was my belief that such irradiations would prove to be palliative only and in no way curative in their ultimate effects.

Between June 30th and July 24, 1933, he received twenty irradiations. He obtained prompt and remarkable relief from all his symptoms. The indurated mass located in the left lower quadrant of the the abdomen decreased rapidly in size, his appetite improved, he gained some weight, quite naturally, he became cheerful and he felt greatly reassured that at last salvation was in sight. However, within a period of three months time all his previous symptoms reappeared in aggravated form. His back pain became so severe that his Chicago physician recommended roentgenography of the lumbo-sacral spine which up to this time had not been radiographed. The fourth and fifth lumbar vertebrae were found to be the seat of malignant invasion. The fourth was necrosed and partly collapsed.

Between February 12th and March 8, 1934, another series of twenty irradiations were administered. He obtained no relief such as followed the first series and, instead of improving, his general condition became progressively worse. To his other symptoms were added dyspnoea, hoarsness and a moderate degree of pain over the lungs. Accordingly in April his lumbo-sacral spine and lungs were roentgenographed in the home with a portable x-ray outfit to determine, if possible, whether further metastases had occurred. The malignant process in the spine appeared to be partially arrested. The lungs, however, were found to contain multiple areas of increased density which evidently were due to malignant infiltration. A roentgenogram of the chest, made two months later, shortly before death from general carcinomatosis, revealed a considerable extension of the pulmonary metastases. Death occurred six years and ten months following orchidectomy and approximately eight years after the onset of the disease.

It seems to me that the history of this case of cancer, from its inception to its termination in death, illustrates the limitations of the value of super-high voltage x-ray irradiations in the treatment of deep-seated malignancy. Certainly, it is freely admitted that the massive dosage of x-rays administered by the modified Coutard method employed by the Chicago radiologist who treated this man ameliorated his symptoms profoundly for a short period of time. However, while this is conceded to be true, it seems to me that it is a self-evident fact that these super-power x-ray irradiations resulted in the disintegration of the pelvic tumor without destroying all the inherent malignant cells which as a consequence of the liquefaction of the connective tissue surrounding this localized mass were liberated into the general circulation, floated away to become lodged in the terminal capillaries of the lungs and there produced multiple metastases.

That pulmonary metastases occurred in this case soon after the administration of these ultra-intensive irradiations was no great surprise to me since twenty years' experience in the radiological treatment of cancer and observation of the end results obtained by other radiotherapists has led to the conviction that while deep cancers are occasionally arrested in their activity for varying lengths of time, they are seldom completely destroyed. Of course, it is realized that some radiologists who, it seems to me, are hyper-enthusiastic optimists, will consider this the conclusion of a confirmed pessimist; nevertheless, I am convinced that cancer will continue to be a major medical problem until the etiology of the disease is discovered. Diphtheria, malaria, and yellow fever were unsolved problems whose satisfactory prophylaxis and treatment baffled the medical profession until their etiology became an established fact; hence, it is reasonable to conclude that cancer will not become amenable to medical control until the nature of the disease is fully understood.

When we consider the well-known fact that it requires from two to five times an erythema dose of x-rays to destroy a superficial basal cell epithelioma of the face, and up to ten and more erythema doses to destroy the more invasive tumors of this variety; that it requires from five to twelve and frequently more erythema doses to destroy a squamous cell epithelioma of the lip; and when we recall that only 95% of the former and 50% to 60% of the latter readily accessible tumors are curable, one wonders by what process of reasoning some radio-therapists justify the extravagant claims they make for x-ray and radium irradiations as a cure for deep-seated cancer.

Finally, I wish to emphasize the truism that the ultimate medical control of cancer will depend entirely upon whether the etiol-

(Continued on page 1004)

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« « « EDITORIALS » » »

Necessary Procedure

AMONG the many responsibilities of the physician is the occasion of suspected poisoning. These instances arise from such widely different circumstances as imbibing methanol "antifreeze," to the more prosaic ingestion of pastry made up with white arsenic instead of baking powder. Self-medication has always contributed very considerably to the numbers of poisoning cases, and with the increase in advertising arts coupled with the too frequent urge to economize on doctors' fees, such accidents continue to occur notwithstanding a generally increased public knowledge of such dangers.

Rarely is a practicing physician equipped and trained to carry out chemical isolation and indentification of poisons; hence, such work is properly assigned to a trained toxicologist. In another place in this issue there occurs an article by Dr. Frank L. Kozelka in which there are pointed out certain necessary steps to be taken by the physician or pathologist. These steps and precautions must be taken before the toxicologist's efforts can be of service in definitely establishing the presence or absence of poisons in the materials submitted to him for analysis. Toxicological examinations not infrequently reveal the identity of the poison early in the course of poisoning and consequently may contribute materially toward the proper type of treatment. Our readers, therefore, are urged to read this article and to keep it in mind, since, to the physician, *accidental poisonings are unexpected.*—A. L. T.

This Business of Medicine

WE OCCASIONALLY hear it said that physicians as a class are notoriously poor business men. Authorities in the field of credit will tell us that physicians fall far below any other group in the collection of accounts. Journals that devote themselves to the field of medical economics urge us to emulate the physician who has adopted the methods of a commercial world. Propagandists for compulsory sickness insurance point to the number of physicians whose income lies under certain levels asserting that the adoption of a socialized medicine would fix all that.

Sometime during this month of December most of us find time to make an audit of our worldly goods. And most of us, like those in every walk of life, shake our heads a bit over the results and mentally make a note that we must do better than that if we hope to retire on a sufficiency when the retirement day comes.

We Wish You A Happy Holiday Season

In connection with our audits this year we would like to suggest, however, a new column or two. We must have an income sufficient to support our families and to enable us to keep up-to-date in medicine. That is true. By and large, we physicians do reasonably well in this respect. All of us would like to see each year something saved towards retirement. None of us do as well as we would wish in this respect and a certain amount of discontent with our margin between income and expense of immediate needs is a healthy thing. It is the spur to further achievements.

But let us not count all our life work in terms of income tax reports. They may say we are poor in business but there are few indeed who say we are poor in scientific learning and the ability to apply our knowledge.

It may be said that we are not very good collectors. But on the other hand neither do we urge our patients to pay eighteen per cent and more to secure money with which to pay us cash on delivery.

We have not adopted the commercial outlook. No, we do not exist on the advertising of non-accepted drugs. We do not patent our discoveries for revenue. We do not wait with our improvements for an annual show but adopt them as fast as they are proven good. We do not advertise our abilities for many as our recoveries may be, they are never as many as we would like. We have not adopted mass production methods because the ills of man are peculiarly his own and susceptible to no mimeographed methods of procedure,—no belt-line methods of readjustment.

Finally, it is said that our incomes are low. If by that it is meant to suggest that we earn more than we collect, most certainly we will agree. If by that statement it is meant to suggest that by and large our efforts bring us incomes that are lower than men in comparable walks of life, those who make the statement know not whereof they speak.

And when we physicians make our audits this year let us not forget our accomplishments that are other than financial. That shattered limb that promises to give such a fine functional result; that problem in family maladjustment that has been solved; that child that was saved and that mother who, thanks to our acquired and inherited knowledge, did not die but lives to care for her family. We may be accused of sentimentalism but are not these the true standards of our value in the world? Not in a business world perhaps, but surely in ours.

Our wills, collectively speaking, may produce no relatives quarreling in court as to our mental capacities. But that is hardly a sign of achievement. We entered upon the profession of medicine because we wanted to alleviate human suffering and pain. In our calculations this month let us judge ourselves on that basis too. Of course we did not accomplish all we wanted to accomplish. But are we not proud of that which we did accomplish? And is that look of anxiety of the family replaced by the smile of confidence not a compensation? Of course it is! It is the richest compensation that exists. Let us never forget it and particularly in these trying times.

The name of the humblest among us will one day be enshrined in the hearts of many, —for what he gave.

Help Your Secretary

WITH but one exception, the Secretaries of the fifty-one component county medical societies undertake their obligations and official duties without a penny of financial reward. This month they are sending out the annual statements for membership. It will tremendously lighten their burdens if all of us make a prompt remittance. May we also add that prompt payment of dues will be of material benefit to the Council in planning how they may best meet the many emergencies that presently confront us all.

. . . . THE PRESIDENT'S PAGE . . . .

The High School Debates

IN MY comment last month, I intimated that, in my opinion, the selection of the subject for the high school debates this year was significant, and that somewhere in the background there was an ulterior motive. After listening to the nation-wide radio debate on this same subject on November 12th, I am more confirmed than ever in this opinion. At the risk of being placed in the category of the boy who cried "Wolf" repeatedly when there was no danger, I wish once again to strongly emphasize the threat to present day methods of medical practice inherent in these debates, and to earnestly urge the necessity for immediate and vigorous action on the part of every individual practitioner who believes in his heart that the private practice of medicine is preferable to state medicine.

In the radio debate, as all of you know who listened to it, the affirmative speakers based their appeal upon the usual wild statements and fallacious statistics which are always brought forward in support of their point of view, and with which we are all familiar. They also implied that there was a rift in the ranks of organized medicine, and that thousands of doctors were in favor of state medicine. As practicing physicians, from our own experience, we know that many, if not most, of these statements are untruths, or are, at any rate, only half-truths, and I believe that almost every medical man, with little or no preparation, could refute them to the complete satisfaction of anyone who would listen with an absolutely open mind.

But in connection with these widespread debates, human nature, being what it is, it is very much to be feared that the public mind is not going to be entirely open to reason. Up to now, the average citizen has not concerned himself very greatly with the problem of medical care, which would appear to be a very good reason for believing that there really is no widespread problem, but with these nation-wide debates, there can be no doubt but that considerable interest in the question of medical care will be aroused, which is undoubtedly the primary object of holding them. The sympathies of the average individual, when he is told that millions of people are suffering from lack of medical care, are immediately aroused. Even though his observations may teach him that such conditions do not obtain in his own community, he nevertheless has a tendency to believe that the statement is true elsewhere. Believing this, the individual in comfortable circumstances, his sympathies aroused, will be inclined to think that state medicine will be a fine thing for the poor, and will favor it; the middle class, together with the poor, upon being assured that they will be relieved of one of their greatest burdens, the fear of illness, and without thinking further of all its implications, will also be for it. The tendency of people is to believe what they wish to believe, and that is why I feel that we will not be dealing with entirely open minds in connection with the debates.

For this reason, as I have said, I believe that these debates constitute a very real threat to the individualistic practice of medicine, and one which every one of us must exert himself to his utmost to meet and overcome.

The material in the HANDBOOK furnished to all the debaters is overwhelmingly in favor of the affirmative side, and let there be no mistake about it, those in charge of these

debates will see to it that the HANDBOOK is thoroughly studied by the participants. Our State Society is prepared to furnish just as much and just as cogent material for negative arguments; the task of every member just now is to see that this material gets into the hands of the debaters, and that it is thoroughly understood and utilized. Merely handing it to the students is not enough. At the time that it is given to them, they should be told to study it carefully for a day or two, and then return to the doctor for a discussion and explanation. This will furnish an excellent opportunity for the physician to fully present organized medicine's side of the argument, an opportunity which he can obtain in no other way.

As I said above, people believe what they wish to believe. As I also said, the public *as yet* is not particularly concerned, but when these debates get under way all over the country a definite degree of interest will undoubtedly develop. For reasons already given, and also as a result of the unopposed propaganda for state medicine of the past few years, when this interest in the subject appears, there is bound to be a definite receptivity, an unconscious bias, in the minds of the people toward the affirmative side of the debate. Under these circumstances, statements made by the affirmative will be accepted as truths and at their face value, with no attempt at analysis whatever. Such a situation makes the task of the negative debaters much more difficult because of the prejudice to be overcome at the outset. Mere statements, no matter how true they may be, opposing the statements of the affirmative, will not suffice. Such statements must be backed up by argument and explanation, in order that their essential truths may be obvious to anyone.

Without help from the medical profession, such arguments will not come from these high school debaters. To begin with, they have not the background to be able to develop the theme properly, and secondly, their inexperience and limited outlook are bound to be strongly influenced by the DEBATE HANDBOOK with its overwhelming insistence on the advantages of state medicine.

Some of you may think that I am taking this situation altogether too seriously, and very possibly I am so doing. But we should keep in mind the fact that these debates are not merely state-wide, but national in their scope; we should remember that in the aggregate, enormous numbers of people will hear them, and will have their attention drawn to state medicine. And judging the future by the past, can any of us doubt that news of affirmative victories will be spread far and wide in the public press, and made the basis of additional and still more effective propaganda? And can any of us doubt that negative victories, which by the way will be few and far between if we do not get busy, will be minimized so far as possible? Even if these things should turn out not to be true, it can certainly do organized medicine no harm to seize the opportunity to put its case before as many laymen as possible. As someone has said, "Medicine is at the cross-roads"; continuing the figure of speech, I repeat again that the way Medicine shall take in the future depends almost entirely upon the attitude and actions of the practitioners of today. We have been extremely lax in the past in not looking after our own interests; let us not continue to be so in the future.

Ralph M. Carter.

SOCIETY PROCEEDINGS

BARRON–WASHBURN–SAWYER–BURNETT

A meeting of this Society was held in October at Cumberland. Speakers and their subjects were:

Dr. J. F. Borg of St. Paul who spoke on "The Significance of Abdominal Pains" and Dr. D. K. Bacon, also of St. Paul, who talked on "Blood Transfusions".

Election of officers then took place, the following being chosen: President, Dr. H. H. Ainsworth of Birchwood; Dr. S. O. Lund of Cumberland, Vice-President, and Dr. D. L. Dawson of Rice Lake, Secretary.

CALUMET

The annual meeting of the Calumet County Medical Society was held on October 29th at the home of Dr. A. C. Engel of New Holstein. Officers elected for the ensuing year are: Dr. A. J. Wagner, Brillion, President; Dr. M. W. Garry, Sherwood, Vice-President, and Dr. R. J. Winkler of Hilbert, Secretary-Treasurer.

COLUMBIA

Physicians from Adams, Columbia and Marquette counties met at Rio, Wisconsin, on November 14th at the Rio Hotel with a dinner at six-thirty o'clock. Members of the Auxiliary were guests.

A report was given by Dr. C. J. Radl of Pardeeville on the establishment of a credit system. A motion was made and seconded that the credit system report be sent to Mr. George Crownhart for constructive or destructive criticism. It was also decided that the credit committee visit Mr. Crownhart and obtain any suggestions he may have to offer.

Following the report of the Treasurer, election of officers took place. The new officers are: Dr. J. W. MacGregor, Portage, President; Dr. R. B. Dryer, Poynette, Vice-President; Dr. C. J. Radl, Pardeeville, Secretary-Treasurer; Dr. H. M. Caldwell, Columbus, Delegate; Dr. W. H. Costello, Randolph, Alternate Delegate; Dr. H. Y. Fredrick, Westfield, Dr. Louis McNamara, Montello, and Dr. E. F. Tierney, Portage, Censors.

Portage was selected as the next place of meeting on December 13th. C.J.R.

DANE

The Dane County Medical Society met at the Park Hotel on Tuesday, November 12th, at eight o'clock. The following program was presented:

Dr. J. S. Supernaw, Madison, read a paper on "A Resume of the Management of Craniocerebral Injuries".

Dr. Thomas Leonard, Madison, discussed "The Ogina-Knaus Theory".

Dr. Charles F. Burke, Madison, talked on "Oxygen Therapy in Pnuemonia". A general discussion followed each paper. Dr. Herman Aitken and Dr. Charles Lewis were elected to membership in the Society. N.T.

EAU CLAIRE–DUNN–PEPIN

A meeting of this Society was held at the Hotel Eau Claire on November 25th with a dinner at six-thirty o'clock. The following were speakers:

Dr. A. F. Bratrud, Minneapolis, who spoke on "Ambulant Treatment of Hernia", and Dr. Erling Platou, also of Minneapolis, who discussed "Contagious Diseases—Prevention and Treatment."

FOND DU LAC

The Fond du Lac County Medical Society held its regular meeting at Bauer's Hotel, Campbellsport, November 14th. The following officers were elected for the ensuing year: President, Dr. R. G. Raymond, Brownsville; Vice President, Dr. J. C. Devine, Fond du Lac; Secretary-Treasurer, Dr. A. M. Hutter, Fond du Lac; Delegate to annual meeting, Dr. D. J. Twohig; Alternate Delegate, Dr. C. W. Leonard, Fond du Lac; Censors, Dr. J. H. Hardgrove, Dr. C. W. Leonard, and Dr. C. F. Werner.

The applications for membership of the following were read and accepted: Drs. L. J. Keenan, E. V. Smith, Jr., and J. J. Smullen. After reports from the various committees, the meeting adjourned.

At the district meeting of October 10th, the following officers of the Sixth Councilor District were elected: President, Dr. D. J. Twohig, Fond du Lac; Vice President, Dr. P. R. Minahan, Green Bay, Secretary-Treasurer, Dr. A. M. Hutter of Fond du Lac. A.M.H.

GRANT

On November first, the annual meeting of the Grant County Medical Society was held in the County Court rooms, Lancaster. The following program was given:

"Common Problems of Infant Feeding" by Dr. John E. Gonce, Madison.

"The Prevention of Goiter in Wisconsin" by Dr. Arnold S. Jackson, Madison. This address was illustrated with lantern slides.

"Certain Phases of Oxygen Therapy" (illustrated with lantern slides) by Dr. Kenneth Lemmer, Madison.

"Tropical Medicine; Its Role in Modern Civilization" by Dr. M. Fernan-Nunez, Milwaukee. This was also illustrated with lantern slides.

"The Immediate Future" by Mr. J. G. Crownhart, Secretary of the State Society.

Dinner was served at Hotel Wright. The Woman's Auxiliary to the Grant County Medical Society were guests at dinner. M.B.G.

JUNEAU

The annual meeting of the Juneau County Medical Society was held at the Hustler Hotel, Thursday, October 31st.

Following the dinner, Drs. H. E. Marsh and Jerome T. Jerome of Madison spoke on the various types of pneumonia.

A motion was made and carried that Dr. A. T. Gregory of Mauston be elected an honorary member of the Juneau County Medical Society in appreciation of his thirty years of service as secretary and treasurer of the society.

The following officers were elected for the ensuing year: President, Dr. Clarence Vogel, Elroy; Vice President, Dr. H. C. Meyer of Necedah; Secretary-Treasurer, Dr. J. S. Hansberry of Wonewoc; Delegate, Dr. F. H. Ferguson, Elroy; Alternate Delegate, Dr. W. T. O'Brien, Mauston; Board of Censors, Dr. Carl Vogel, Elroy, Dr. C. H. Golden, Wonewoc and H. W. Christensen of Mauston.

It was agreed that the Society meet every three months, the first of these meetings to be held at Mauston on January 9th.

KENOSHA

Mr. George Crownhart, Secretary of the State Society, spoke before a meeting of this Society on October 29th. The subject of his address was "Medical Economics".

MANITOWOC

The Manitowoc County Medical Society held its meeting on November 21st for the election of officers for 1936. The following were chosen: President, Dr. J. E. Meany, Manitowoc; Vice-President, Dr. J. M. Kelley, Cato, and Dr. R. S. Simenson of Valders, Secretary and Treasurer. R.S.S.

MILWAUKEE

The November meeting of the Medical Society of Milwaukee County was held on the 8th at the Milwaukee Athletic Club.

A symposium on the heart was presented as follows:

"Treatment of Peripheral Circulatory Failure" by Dr. Louis M. Warfield, Milwaukee.

"The Treatment of Heart Failure" by Dr. Chester M. Kurtz, Madison.

OUTAGAMIE

A sectional meeting at which Fond du Lac, Winnebago, Calumet, Brown-Kewaunee-Door County Medical Societies were guests of the Outagamie County Medical Society met Thursday, November 21st at the Conway Hotel, with dinner followed by a program.

The speaker was Dr. Alfred W. Adson, head of the department of neurology, Mayo Clinic, who gave a very excellent presentation of the subject of "Essential Hypertension: Surgical Consideration; A Study of the Clinical Results Obtained by Extensive Sympathectomy and Rhizotomy." This address was illustrated with lantern slides and a movie film.

The meeting was attended by one hundred physicians who generally agreed that the subject was presented in a masterful manner. G.W.C.

POLK

At a meeting of the Polk County Medical Society held at Centuria in November, the following officers were elected: President, Dr. J. A. Riegel, St. Croix Falls; Vice-President, Dr. W. C. Andrews, and Mr. Carl Swenson of Frederic, Secretary-Treasurer.

PORTAGE

The Portage County Medical Society held a meeting at the Hotel Whiting, Stevens Point, on Tuesday evening, October 29th.

Dinner was served and the speaker for the evening was Dr. Gorton Ritchie of Madison. The subject of his address was "Postmortem Examinations". E.E.K.

MILWAUKEE ACADEMY OF MEDICINE

A meeting of the Milwaukee Academy of Medicine was held on November 19th at eight o'clock. The following program was presented:

1. Presentation of clinical cases, specimens and roentgenograms by the following: Drs. A. Dwight Spooner, A. A. Holbrook, Leon H. Guerin, R. M. Stark, O. A. Sander and A. R. Langjahr.
2. "Postoperative Complications" by Dr. William S. Middleton, Dean of the Medical School, University of Wisconsin.

MILWAUKEE OTO-OPHTHALMIC

The November meeting of the Milwaukee Oto-Ophthalmic Society was held at the University Club on Tuesday, November 12th.

Dr. W. E. Grove of Milwaukee spoke on "Vestibular Injuries", the discussion of which was opened by Dr. Franz Pfister.

WISCONSIN GENERAL HOSPITAL

On November 5th, the staff of Wisconsin General Hospital held a meeting in the medical building. Papers on certain blood diseases were presented by the following:

Dr. E. S. Gordon and Dr. J. E. Gonce—"The Purpuras".

Dr. F. J. P. Pohle—"Agranulocytosis: Review of the Literature."

Dr. O. O. Meyer—"The Treatment of Agranulocytosis with Pentnucleotide".

On November 19th, a symposium on "Shock" was presented.

Dr. Walter J. Meek spoke on "Mechanisms of Shock".

Dr. Frank Weston discussed "Manifestations and Treatment of Non-Surgical Shock".

Dr. E. R. Schmidt spoke on "Manifestations and Treatment of Surgical Shock".

THE WOMAN'S AUXILIARY

President—
Mrs. F. Gregory Connell, 420 Washington Blvd., Oshkosh
President-Elect—
Mrs. C. A. Harper, 520 N. Pinckney St., Madison
Secretary—
Mrs. Theodore J. Gunther, 2117 N. 8th St., Sheboygan
Treasurer—
Mrs. Frank W. Pope, 2406 Kinzie Ave., Racine
Public Relations Chairman—
Mrs. Arthur J. Wiesender, Berlin
Program Chairman—
Mrs. Ralph M. Carter, 622 S. Webster Ave., Green Bay
Hygeia Chairman—
Mrs. Harold M. Coon, River Pines Sanatorium, Stevens Point
Organization Chairman—
Mrs. Arthur Sullivan, 930 E. Gorham St., Madison
Archives and Historian—
Mrs. C. A. Harper, 520 N. Pinckney St., Madison
Press and Publicity Chairman—
Mrs. Earle F. McGrath, 429 W. 6th St., Appleton
Parliamentarian—
Mrs. Robert E. Fitzgerald, 1739 69th St., Wauwatosa
Chairman of Nominating Committee—
Mrs. Arthur J. McCarey, 902 S. Madison St., Green Bay

A Message from Dr. Olin West, Secretary of the American Medical Association*

ONE who has had the privilege of attending meetings of several of the most active county and state auxiliaries can but be impressed with the earnest and purposeful interest of their members in the work of these organizations. It is evident beyond question that the wives of physicians who are giving active support to their local, state and national auxiliaries are eager to do all they can to promote the cause of medical organization and to serve the public interest. They are imbued with the same spirit that is characteristic of the true physician and are actuated by the same ideals as those for which the representative profession has always stood.

There are, naturally, many differences in the working programs of county auxiliaries as well as in those of state groups, because the general conditions in the individual county or state may and usually do vary widely from those which obtain in other counties and states. It would not be possible, nor, perhaps, desirable if possible, to have a uniform plan of work for all. The auxiliaries are, after all, intended to serve as aids to medical societies and, except for those that are common to all societies because of the very nature of medicine and its service, the problems of one society may be quite different from those of another or the methods to be applied in their solution may be distinctly different. I have been asked more than once to suggest a program of work for county or state auxiliaries and have had to admit my inability to comply with such requests. But I have freely and willingly offered one or two suggestions that I believe to be quite worthy the consideration of every auxiliary. Since Mrs. Simonds has charged me to prepare a "squib" for this column I make bold to offer them again, though I know that some who have heard them before are quite tired of hearing them.

The first has to do with programs of women's clubs and other similar groups. I think I know it to be true that many—if not most—of these groups have been exploited by promoters, by faddists, and even by fakers. Arrant quacks have secured places on the programs of organizations of women to tell their members more or less plausible stories intended to promote their own purely selfish ends and with their plausible tales have presented statements in which every element of truth has been distorted or entirely disregarded. Quack "remedies," quack "diets," health fads, have all thus been promoted and in many instances intensive effort has been made to undermine clearly established facts, developed by scientific research and proved through clinical application, pertaining to health and its preservation and to disease and its cure or relief. Since many auxiliary members are also members of other women's groups, a helpful public service could be performed if every auxiliary would seek and secure an opportunity to

* From the Bulletin of the American Medical Association, October, 1935.

safeguard the programs of these other groups by preventing the quacks and fakers from securing assignments. No doubt representatives of auxiliaries as members of program committees of other organizations could keep off the frauds and fanatics and could also secure the services of reputable and qualified speakers who can bring truthful and instructive messages.

At practically all sessions of state legislatures a mass of bills pertaining to medicine and public health is poured into the legislative hoppers. In many, if not in all instances the state medical associations have duly appointed committees that study pending bills and attempt to carry out the policies of the organized profession designed to serve at once the interests of scientific medicine and of the public. These legislative committees of state associations are generally composed of experienced persons and usually have outlined well considered plans of action. In my *very* humble opinion the auxiliary should not attempt to deal with medical or public health legislation unless or until its aid has been specifically asked for, after which care—great care—should be taken not to interfere with plans definitely adopted by the state association committee.

Having complied with instructions to "write something," with the one suggestion to "Do" and another to "Don't", I respectfully extend my sincere good wishes for all auxiliaries and offer assurances of my very great respect for all of their officers and members.

—Olin West.

RADIO PROGRAMS

A list of the dramatized radio presentations of the American Medical Association and the program of the State Medical Society of Wisconsin will be found on page 932.

Innovation in Auxiliary's Hygeia Campaign

In the effort to hold Wisconsin in first place among all state auxiliaries in extending the usefulness of Hygeia, a special insert is being run in this issue of the Wisconsin Medical Journal. The insert is a copy of the December cover of Hygeia, on the reverse side of which is found a special subscription offer and an appeal to use Hygeia in the office, as Christmas gifts, and as gifts to promote health educational work in the schools.

Under the introductory subscription offer, an eight-months subscription can be secured for $1.00. Regular subscription to Hygeia for the year or for renewals are at the regular rate of $2.50 a year.

The coupon found at the bottom of the insert carries a credit line to the Wisconsin Auxiliary and all subscriptions received as result of the use of this insert would be credited to Wisconsin in its campaign to hold first place won at the Atlantic City session last June.

County News Items

Dane County

Mrs. C. A. Harper of Madison was hostess to the members of the Auxiliary to the Dane County Medical Society on November 13th. Assisting Mrs. Harper during the luncheon hour were Mrs. E. L. Sevringhaus, Mrs. H. L. Greene and Mrs. R. M. Waters, all of Madison.

Following the luncheon and the short business session, members present started work on the dressing of twenty dolls for the Empty Stocking Club,—an organization for providing Christmas presents for children in families in needy circumstances. After the first of the year, the Auxiliary will assist with clothing for the Madison Kiddie Camp, which is an organization to provide outdoor life during the summer months for under-privileged and undernourished children.

Douglas County

Reports of the annual meeting featured the October meeting of the Auxiliary to the Douglas County Medical Society. Mrs. T. J. O'Leary of Superior, President of the Douglas County Auxiliary, and Mrs. H. J. Orchard, Superior, delegate to the state meeting, reported on the high lights of the Auxiliary proceedings at the Milwaukee session. After general discussion it was determined that meetings would be held every three months, the next meeting scheduled for December 4th.

Grant County

Members of the Auxiliary to the Grant County Medical Society held a most enjoyable meeting at Lancaster on November first. The Auxiliary met at Hotel Wright for a business meeting. Following this they adjourned to the County Court rooms to meet with members of the Grant County Medical Society to hear the concluding two papers on the program of that society. These papers included a discussion of sickness insurance by Mr. J. G. Crownhart, Secretary of the State Medical Society of Wisconsin, and an illustrated lecture and travel talk on tropical medicine by Dr. F. Fernan-Nunez, professor of pathology, Marquette University School of Medicine, Milwaukee. At the conclusion of this late-afternoon program, members of the Society and Auxiliary met for dinner at Hotel Wright.

Milwaukee County

The November meeting of the Woman's Auxiliary to the Medical Society of Milwaukee County was held at the Milwaukee Athletic Club, November 8th. Following the luncheon, Aimee Zilmer of the Wisconsin State Board of Health, guest speaker, addressed the Society on "The Adolescent Girl, Her Problems." Iris Fellow Roche, Secretary of the Central Volunteer Bureau, explained the aims and purposes of the Volunteer Service Bureau.

The following members were announced by the membership committee: Mrs. F. X. McCormick, Mrs. Walter S. Ott, Mrs. A. W. Sivyer.

Eight speakers were placed in October by the public relations committee. The educational committee gave a very instructive report of Dr. Springer's Temple of Health which was recently exposed by the A. M. A.

A tour through the Goodwill Industries on November 15th, was arranged by the public welfare committee.

In the absence of Mrs. Louis Warfield, the report of the proceedings of the annual session of the State Auxiliary was read by Mrs. J. H. Sure. Mrs. H. J. Heeb appointed Mrs. H. J. Cannon to succeed Mrs. William Jermain on the Board of Directors. The following were appointed on the nominating committee: Mrs. R. P. Schowalter, Mrs. E. L. Baum, Mrs. E. P. Bickler, Mrs. G. H. Friedman, Mrs. William Jermain, Mrs. H. M. Hawkins, Mrs. F. D. Murphy.

Outagamie County

Members of the Auxiliary to the Outagamie County Medical Society were the guests of the Auxiliary to the Winnebago County Medical Society at a luncheon meeting held in Neenah on November 25th. Details of the meeting will be reported in the next issue of the Journal.

Rock County

After a four-months vacation, the Woman's Auxiliary to the Rock County Medical Society opened the first meeting on October 22nd, with a buffet supper at the home of the secretary, served by a special committee. Twenty-two members were present.

Mrs. T. F. Shinnick, President, presented the guest speaker of the evening, Dr. Russell F. Wilson, pathologist of the Beloit Municipal Hospital, whose subject was "Cancer." Dr. Wilson stressed the insidiousness of that formidable disease and the part which can be played by the women of the auxiliary in educating the lay public (women) to the importance of early examination of any suspicious breast conditions and immediate repair of all lacerations occurring during childbirth.

Following this talk the business meeting was called to order by the president.

The minutes of the last meeting were read and approved. There were no standing committee reports.

A letter from Mrs. Gregory Connell, State President, praising the activities of the Woman's Auxiliary to the Rock County Medical Society, as reported at the State Convention, was read.

Echoes of the Milwaukee Convention were given by the president and the delegate. The secretary reported that three Rock County auxiliary members have been appointed to the state nominating commitee. It was moved, seconded, and carried that letters be sent to all delinquent members explaining the situation as existing in the records of the state auxiliary.

It was moved, seconded, and carried that the Constitution and By-Laws, presented by a committee of three past presidents, be adopted.

Meeting adjourned.

Waukesha County

The Auxiliary to the Waukesha County Medical Society met on Wednesday, November 6th, in a joint meeting with the Medical Society. Dr. and Mrs. H. G. B. Nixon of Hartland were hosts to the Auxiliary and the Medical Society, both for the meeting and at dinner after the meeting. A very interesting talk on "The Uses of Infra-red Photography as an Adjunct to Diagnosis and in Research", was presented by Professors Leo Massopust and Percy Swindle of Marquette University.

Winnebago County

Members of the Auxiliary to the Winnebago County Medical Society held their regular session in the form of a luncheon and meeting on October 28th.

The program opened with brief reports on the state meeting at Milwaukee in September by Mrs. H. A. Romberg and Mrs. F. Gregory Connell, both of Oshkosh.

Mrs. T. D. Smith of Neenah read an editorial from the Journal of the American Medical Association concerning socialized medicine. Attention of the members was called to the radio program which is being conducted by the State Medical Society of Wisconsin. These health talks are presented every Tuesday, Wednesday, and Thursday mornings at 9:30 A. M., over stations WHA, Madison, and WLBL, Stevens Point.

News Items and Personals

Three lectures on "Fight Cancer With Knowledge" have been presented recently before lay audiences.

Dr. R. F. Wilson of Beloit, in a talk before the Woman's Auxiliary of the Rock County Medical Society, presented the motion picture and lecture on October 22nd.

Dr. C. G. Richards of Kenosha gave the address before a public meeting sponsored by the Woman's Auxiliary of the Kenosha County Medical Society which took place at the Salvation Army hall on November 4th.

Dr. E. F. Andre of Kenosha also presented this material before a group which met on November 19th.

This manuscript and motion picture is available without charge to all physicians through the Cancer Committee of the State Society and can be secured by addressing the State Medical Society of Wisconsin, Madison, Wisconsin.

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Dr. J. D. Fuller, formerly of Baraboo and Brownsville, has taken over the practice of Dr. R. D. Cunningham of Cadott. Dr. Cunningham recently received a commission as captain in the U. S. Army and is stationed at Fort Sheridan, Illinois.

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Dr. Erich Wisiol, Stevens Point, was a speaker on the program of the north central branch of the American Urological Association which held its annual meeting in Rochester, Minnesota, on November first.

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Dr. W. C. Edwards of Richland Center was elected President of the local Kiwanis Club for the coming year. He is also President of the Richland County Rod and Gun Club and in October, accompanied by a friend, spent two weeks hunting in the Rocky Mountains near Cody, Wyoming. Each hunter shot a bull elk and a buck mule deer, and, in addition, Dr. Edwards got a black bear.

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At the annual conference of Secretaries of Constituent State Medical Associations held at the Palmer House, Chicago, on November 15th and 16th, Mr. J. G. Crownhart, Secretary of the State Society, was one of the speakers. The subject of his address was "A Basis for Future Developments of Medical Service".

Others who attended the conference from Wisconsin were Dr. Rock Sleyster, Wauwatosa, Chairman of the Board of Trustees of the American Medical Association; Dr. S. E. Gavin, Fond du Lac, President-elect of the State Society; Mr. Theodore Wiprud, executive secretary, Medical Society of Milwaukee County; Mr. Ralph Weber, assistant to Mr. Wiprud, and Mr. George B. Larson, assistant to Mr. Crownhart.

Dr. Ralph M. Waters, Madison, was one of the speakers at the sixth annual clinical conference which met at Oklahoma City, Okla., on November 4th.

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Dr. Karl E. Kassowitz of Milwaukee has recently published a book under the title of "Around A World On Fire" which tells about his experiences in the World War, in Siberia and Manchukuo.

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Dr. and Mrs. J. D. Nicholson of Milltown on November 10th started on their sail-boat trip from Taylors Falls, Minnesota, to Florida by way of the St. Croix and Mississippi rivers. They will follow the coast line and their final destination will be Florida where they will spend the winter. The boat is of Dr. Nicholson's own design and is eighteen feet long and six feet wide, and the mast is fourteen feet high. It is also equipped with an outboard motor.

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Dr. and Mrs. C. F. Harris of Elkhorn returned the latter part of November from a six weeks trip to New York. While there, the Doctor took special work in the New York Eye and Ear Infirmary.

BIRTHS

A son to Dr. and Mrs. W. B. Walton, Milwaukee, on October 13th.

A daughter to Dr. and Mrs. Paul Brehm, Milwaukee, on October 28th.

MARRIAGES

Dr. Horace J. Hansen, Sheboygan Falls, to Miss Elizabeth Huibregtse on October 26th at Oconto, Wisconsin.

DEATHS

Dr. H. B. Podlasky, Milwaukee, editor of the Radiological Section of the Wisconsin Medical Journal, died suddenly of heart disease at his home on Sunday, November third.

Born at Minneapolis in the year 1884, he attended the University of Minnesota before entering the Jefferson Medical College, Philadelphia, from which he graduated in 1909. During the World War, he served two years on the staff of the Army Hospital, New York, with the rank of captain.

At the time of his death he was associate clinical professor of roentgenology at Marquette University School of Medicine and was chief of the Mount Sinai Hospital X-Ray Department.

Dr. Podlasky was a member of the Medical Society of Milwaukee County, the State Medical Society, and was a fellow of the American Medical Association.

He was vice-president of the American College of Radiology, a fellow of the American College of Physicians, the Milwaukee Academy of Medicine, the Milwaukee X-Ray Society, and the American Roentgen Ray Society.

Surviving are his widow, a daughter, Judith, and two sisters, Martha Podlasky of the Milwaukee public library staff, and Mrs. Henry Traxler of Janesville.

Dr. H. D. Sykes, Milwaukee, died at his home on November 13th after a week's illness.

Dr. Sykes was born in Janesville, May 12, 1861 and after graduating from the Wisconsin College of Physicians and Surgeons in 1901, he began his practice in Milwaukee.

He was a member of the Medical Society of Milwaukee County, the State Medical Society, and the American Medical Association.

He is survived by two daughters and a son, all of Milwaukee.

Dr. Raymond J. Wenker, Milwaukee, died on October 24th at his home in Milwaukee after a brief illness.

He was born in the year 1868 and came to Milwaukee in 1891 after graduating from the Chicago Dental College. After practicing dentistry for several years he became a professor in the dental department of the old Milwaukee Medical College and later was dean of the Dental College of the old Wisconsin Physicians and Surgeons College.

In 1916, Dr. Wenker received his doctor of medicine degree at Marquette University School of Medicine. From 1921 to 1928 he was a professor of surgery at that University.

He is survived by his widow.

Dr. Victor G. Foley, Milwaukee, died on October 18th.

He was born at Random Lake, Wisconsin, on March 21, 1892. His early education was obtained in the public schools of Milwaukee and at the Marquette Academy. He was a graduate of the Marquette University School of Medicine, completing his medical course in 1915.

Surving Dr. Foley are four brothers, one of whom is Dr. Leander J. Foley of Milwaukee, and a sister.

SOCIETY RECORDS

New Members

A. C. Taylor, Washburn.
R. E. Garrison, Wisconsin Rapids.
Alex H. Phillips, Marshfield.
J. E. Halloin, Green Bay.
C. S. Bolles, De Pere.
C. R. Kwapiszewski, Pulaski.
Charles Leasum, Sturgeon Bay.
J. R. Goggins, Pulaski.
R. B. Lenz, De Pere.
D. W. Lynch, 2532 E. Bradford Ave., Milwaukee.
C. M. Steiner, 1632 W. Center St., Milwaukee.
F. J. Hofmeister, 5930 W. Burnham St., W. Allis.
R. H. Feldt, 720 E. Wisconsin Ave., Milwaukee.
B. L. Fabric, 3400 W. North Ave., Milwaukee.
A. C. Hansen, 4730 W. Lisbon Ave., Milwaukee.
Joseph J. Grimm, 231 W. Wisconsin Ave., Milw.
Richard D. Champney, 4028 W. Burleigh St., Milw.
Frank J. Pallasch, 820 E. Center St., Milwaukee.
Donald M. Norton, Medford.
Chas. N. Lewis, Wis. Gen. Hospital, Madison.
Herbert M. Aitken, Wis. Gen. Hospital, Madison.
M. L. Jeter, Wheeler.
John W. Lowe, Merrillan.

Change in Address

C. C. Stein, Kohler to 314 Main, Port Washington.

STATE RADIO PROGRAM

Radio health messages are presented by the State Medical Society each Tuesday, Wednesday and Thursday morning at 9:00 A.M. These talks are broadcast over the State-Owned Radio Stations,—WHA (940), Madison, and WLBL (900), Stevens Point.

The schedule for this month follows:

December 12—Dame Nature's School
December 17—The Body Louse
December 18—Children's Christmas Toys
December 19—St. Vitus Dance
December 24—Christmas and the Children
December 26—Too Much Sugar
December 31—Piles
January 1—A resume of Health Advancement
January 2—Dandruff
January 7—Hernias
January 8—Your Back—Your Kidneys
January 9—Tropical Diseases

LADIES AND GENTLEMEN YOUR HEALTH!

DRAMATIZED RADIO HEALTH PROGRAMS

of the

American Medical Association

Each Tuesday at 4:00 P.M. over the N.B.C. Net Work

December 10—Hunting Accidents
December 17—Animal Diseases in Man
December 31—Eat, Drink and Be Merry
January 7—Winter Ills.

"An enjoyable half-hour"

MEDICAL ECONOMICS

NEW REPORT REQUIRED

At the 1935 session of the Wisconsin Legislature a new law was added to our statutes. It requires that anyone involved in a highway accident amounting to $50.00 or more property damage or *injury* or death to any person, must report the accident within 48 hours to the State Highway Commission at Madison.

In the previous paragraph the word "injury" was placed in italics, as we feel particular emphasis should be placed upon this word contained in the statutes. In actual practice, this law means that every accident occurring on the highways, must be reported. It is conceivable that in any automobile accident, the individuals involved might receive a minor cut or bruise. If this injury were not reported this fact might be considered as neglect to comply with the law. We urge upon you that should you be personally involved in an accident that you report this immediately to the State Highway Commission at Madison. Blanks for this purpose may be secured from Police and Sheriff Departments, Coroners and County Clerks.

This does not mean, however, that accidents which you are called upon to treat are to be reported. It is only when you as an individual are involved in the accidents that a report is required.

HOW WE INVESTIGATE

Several of our members, in complimenting the Society on the excellent reports which go to those contemplating signing collection agency contracts, have inquired how we assemble our information.

When an original inquiry comes into the office of the State Society concerning a collection agency, the contract that the Doctor submits is turned over to legal counsel of the Society for an analysis. Legal counsel of the Society has analyzed so many of these plans that he is able to discover very quickly all the usual earmarks of that type of contract wherein the collection agency is a good collector for the agency but not for the physician. While legal counsel is preparing a memorandum on the contract itself, inquiries are forwarded to the Association of Commerce in the city in which the collection agency has its home office. A second inquiry is made through bank channels to ascertain its financial standing. A third inquiry is made to the Bureau of Medical Economics of the American Medical Association and in event that the names of any physicians are given who have used this service, several of them are solicited for confidential information on their own experience.

The assembled material is digested and the report goes forward to the member who has made the original inquiry. This is done practically always within the matter of twenty-four hours and rarely does more than forty-eight hours elapse between the time the physician asks the office for information and the time that it is in the mails.

It pays to investigate before you sign, and for members of the State Medical Society it costs nothing but a postage stamp.

RELIEF

Within the past thirty days, three bulletins have been sent to officers of the component county medical societies with reference to the medical relief situation within the state. Perhaps the most frequent question asked by officers is, "When will Federal funds be discontinued?"

Because this illustrates the uncertainty that takes place under all government control, we mention this subject in these columns. Interviews with the highest authorities in Wisconsin and not infrequently with some at Washington by long distance, inevitably disclose that even they have no definite information. Presumed orders are sometimes announced in the public press but are not received officially. Nothing is more difficult than to issue any reliable forecast on relief plans of the Government.

NEW NARCOTIC LAW

The attention of all members of the Society is called to the terms of the new state narcotic law, outlined in this issue of the Journal, which becomes effective on January first. This law is the so-called "Uniform Narcotic Act" as prepared in model by representatives of all interested agencies, including the American Medical Association. It was passed during the recent session of the Wisconsin legislature after two amendments, deemed essential by our own Society, were adopted.

Forms for narcotic records to be prescribed by the State Board of Health had not been issued as this Journal went to press. Each member will receive a bulletin advising him as to record forms prior to the first of the year. Watch for this bulletin.

HELPING THE DEBATERS

During the past sixty days, 4,200 copies of pamphlets concerning various aspects of the problem of furnishing medical care have been furnished to high school debate students in Wisconsin. Another 1,400 copies have been placed in the hands of the Extension Division for distribution in packets that have been assembled for high schools debating the subject. Still another 1,700 have been distributed to libraries.

Practically all of these pamphlets have gone forward as result of requests of debate coaches, individual students or of the Forensic Association. It has been a tremendous load upon the resources of the

LIBRARY
COLLEGE OF PHYSICIANS
OF PHILADELPHIA

Society, but an appropriation from the surplus has been made available by the Council to the end that no high school students in Wisconsin who want to inform themselves upon this subject matter need go without the material presenting the views of medicine simply because the Society could not fill the request.

Members should recall that when debate students see them to secure information, that copies of the following publications are available without charge by addressing the offices of the Society. They are:

- Sickness Insurance Catechism.
- Sickness Insurance Not the Remedy.
- Sickness Insurance and Sickness Costs.
- Sickness Insurance and the Propagandist Foundations.
- Discussion Outline of Sickness Insurance and Socialized Medicine.
- What About The Future?—Address by R. M. Carter, M.D., President of the State Medical Society.

W. P. A. EMPLOYABILITY EXAMINATIONS

An example of the facilities of organized medicine that are made available to any proper agency for the furthering of the joint interests of the agency, the patient, and the physician is to be found in a recent request from the Wisconsin Works Progress Administration. Called into the office of the State Administrator on five minutes' notice, the Society was told that authority had been granted by Washington for project supervisors to order physical examinations for men assigned to the projects from relief rolls where physical condition did not seem adequate to carry on the work of the project. The Administrator asked whether the State Society was in position to furnish the Wisconsin Administration with a suggested form for such an examination; whether it could advise physicians as to the purposes of the examination; whether it could advise as to a reasonable fee at which most physicians probably would be willing to conduct such an examination, and finally, whether it could furnish the Administration with a list of physicians, arranged by counties and towns,—all such information to be in the hands of the Administrator within forty-eight hours.

The request was filled within the time limit. So soon as the plan is placed in operation, the Society will issue a special bulletin to members advising them to that effect and of the essential data.

HEALTH EDUCATION

Members frequently ask how they may help as individuals in educating the public to the services now available to them through their family physicians at a cost within their means to afford. There are many ways but in this issue we wish to call attention to the colored insert page on HYGEIA to be found in the center of the Journal. If Hygeia is not on your reading table, take advantage of the special introductory offer of eight months for $1.00 now. This is something all can do.

FINANCE PLANS

Taking a leaf out of the note-book of installment selling devices, some so-called finance companies have been urging physicians to turn their collection problems over to their "medical departments". Your State Society has analyzed several of these plans and has yet to find one in which the patient does not pay at least eighteen per cent for the privilege of borrowing money from the finance company with which to pay the physician. When we called this to the attention of the representative of one company, he made the naive remark that the total involved did not amount to much and besides the patient "did not recognize it".

We wish respectfully to suggest that companies who are trying to sell physicians on collection methods which involve the patients borrowing money at eighteen per cent are making no contribution to the profession of medicine, but on the contrary are urging physicians to lend themselves to a procedure which, should it become at all prevalent, would receive a prompt public rebuke.

This is but another example of laymen trying to commercialize a profession which has survived through the years because it was a profession and not commercialized.

New State Narcotic Act Effective January First; Major Provisions Summarized

THE new state uniform narcotic act, approved by the American Medical Association becomes effective on January first. Major provisions affecting and of particular interest to physicians, follow:

Definitions—Section 1 gives the meaning of words and phrases used in the act. For example, "physician" is defined as a person licensed under section 147.17, when such person is engaged in his profession under circumstances that authorize him under such license then and there to practice by the use of narcotic drugs. This definition was adopted at the request of the State Medical Society in order that the statutes will have uniform definitions of what constitutes a "physician". The same section defines "narcotic drugs" as coca leaves, opium, cannabis and every substance neither chemically nor physically distinguishable from them, and summarizes the compounds included in the above named drugs.

Acts Prohibited—Section 2 makes it unlawful to manufacture, possess, sell, prescribe, administer, dispense or compound any narcotic drug except as authorized in the chapter.

License Required; Physicians—Section 3 prohibits the manufacture, compounding, mixing, cultivating, growing, or by other process, producing or preparing narcotic drugs without a license issued by the state board of health. Because of the inclusiveness of that section, the State Medical Society sponsored section 24 which provides that nothing in the chapter "shall authorize the sale, dispensing, prescription, administration or use of drugs of any kind by any person or under any circumstances contrary to any other provision of law; nor shall anything in this chapter be construed to prohibit physicians, dentists, or veterinarians from compounding or mixing narcotic drugs in good faith for dispensing or administering in the course of their professional practice". This section was urged in order to make doubly certain that nothing in the law would authorize the handling or use of any kind of drugs when it is contrary to any other law, and also to make certain that the prohibition of section 3 would not prohibit those licensed to practice medicine and surgery from compounding or mixing narcotics as may be required in the course of their practice.

License, Issuance and Revocation—Section 4 gives the board of health broad powers governing the issuance of the license and revocation of the same.

Sale on Written Orders—Section 5 permits a duly licensed manufacturer or wholesaler to sell and dispense narcotic drugs on official written orders to a manufacturer, wholesaler or apothecary; a physician, dentist or veterinarian; a person in charge of a hospital for use by or in the hospital; to a person in charge of a laboratory for use in the laboratory for scientific and medical purposes; to a person possessing a certificate of exemption as required by the Federal Narcotic Law, who is in the employ of the United States government or any state, territorial, district, county, municipal or insular government and who is purchasing or receiving drugs by reason of his official duties; to a master of a ship or person in charge of any aircraft upon which no physician is regularly employed, for medical purposes, providing he possesses a special order form approved by a commissioned medical officer or acting assistant surgeon of the U. S. Public Health Service; and to a person in a foreign country if the provisions of the Federal Narcotic Law are complied with.

Official written orders must be signed in duplicate and copies must be preserved for two years. Compliance with the order form requirements of the Federal Narcotic Law is deemed compliance with the foregoing provisions.

Sale by Apothecaries—Section 6 provides that an apothecary in good faith may sell and dispense narcotic drugs upon written prescription of a physician, dentist or veterinarian, dated and signed by the person prescribing and bears the full name and address of the patient or animal and the name, address and Federal registry number of the person prescribing. Prescriptions must be kept on file for two years and shall not be refilled. An apothecary also upon an official written order may sell to a physician, dentist or veterinarian, in quantities not exceeding one ounce at any one time, aqueous or oleaginous solutions of which the content of narcotic drugs does not exceed a proportion greater than 20 per cent of the complete solution, to be used for medicinal purposes.

Professional Use of Narcotic Drugs—Section 7 provides that a physician or dentist, in good faith and in the course of his professional practice only, may prescribe, administer, or dispense narcotic drugs, or he may cause the same to be administered by a nurse or intern under his direction and supervision. A similar provision is set up for veterinarians and their assistants or orderlies. Persons who have obtained from a physician or dentist narcotic drugs for administration to a patient during the absence of such physician or dentist must return to him any unused portion of such drugs when no longer required by the patient.

NEW FORMS

Members will be advised as to record forms so soon as they have been established by the State Board of Health. Watch for your special bulletin.

EXEMPTIONS ARE ESTABLISHED

Exempted Preparations—Section 8 sets up certain exemptions to provisions of the chapter as follows:

1. Prescribing, administering, dispensing or selling at retail any medicinal preparation that contains in one fluid ounce, or if a solid or semi-solid preparation, in one avoirdupois ounce, (a) not more than two grains of opium, (b) not more than one-quarter of a grain of morphine or of any of its salts, (c) not more than one grain of codeine or of any of its salts, (d) not more than one-eighth of a grain of heroin or any of its salts, (e) not more than one-half of a grain of extract of cannabis nor more than one-half of a grain of any more potent derivative or preparation of cannabis, (f) and not more than one of the drugs named above in clauses (a), (b), (c), (d) and (e).

2. Prescribing, adiministering, dispensing or selling at retail liniments, ointments, and other preparations, that are susceptible of external use only and that contain narcotic drugs in such combination as prevent their being readily extracted, except that the act shall apply to all liniments, ointments, etc., that contain coca leaves in any quantity or combination.

The foregoing exemptions, however, are subjected to the following conditions:

1. No person may prescribe, dispense, administer or sell to any one person or for the use of any one person, any of the exempted preparations when he knows or can by reasonable diligence ascertain that such prescribing, dispensing, etc., will provide the person within any 48 consecutive hours with more than four grains of opium, or more than one-half grain of morphine or any of its salts, or more than two grains of codeine or any of its salts, or more than one-quarter of a grain of heroin or any of its salts, or more than one grain of extract of cannabis or one grain of any more potent derivative or preparation of cannabis, or will provide such person within 48 consecutive hours with more than one exempted preparation.

2. The medicinal preparation or the liniment, ointment, etc., shall contain, in addition to the narcotic drug in it, some drug or drugs conferring upon it medicinal qualities other than those possessed by the narcotic drug alone.

3. Nothing in the section shall be construed to limit the kind and quantity of any narcotic drug that may be prescribed, administered, dispensed or sold, to any person or for the use of any person or animal, when it is prescribed, administered, dispensed or sold in compliance with the general provisions of the act.

KEEPING OF RECORDS

Records to be Kept—Section 9 pertains to the keeping of records. It requires a physician, dentist, veterinarian, etc., to keep a record of narcotic drugs received by him and a record of all such drugs administered, dispensed or professionally used by him, otherwise than by prescription, when the amount administered, dispensed or professionally used in the treatment of any one person exceeds in any 48 consecutive hours: (a) four grains of opium, or (b) one-half grain of morphine or its salts; (c) two grains of codeine or its salts; (d) or one-fourth of a grain of heroin or its salts; or (e) one grain of extract of cannabis or one grain of any more potent derivative or preparation of cannabis, or (f) a quantity of any other narcotic drug or any combinations of narcotic drugs that exceed in pharmacologic potency any one of the foregoing drugs in the quantity stated. *This means that a physician does not have to keep a record of narcotic drugs administered, dispensed or professionally used when the amount for any one person does not exceed in any 48 consecutive hours the above stated quantities.*

A physician or dentist using small quantities of solutions or preparations of narcotic drugs for local application need not keep a record of the amount of each solution or preparation applied by him to individual patients if he keeps a record of the quantity, character and potency of such solutions or preparations purchased or made up by him.

Manufacturers, wholesalers and apothecaries and persons who purchase for resale or who sell exempted narcotic drug preparations, need not keep records of narcotic drugs received or disposed of by them in addition to records required by or under the Federal Narcotic Law.

Form and Preservation of Records. The form of records shall be prescribed by the state board of health. The record of narcotic drugs received shall in every case show the date of receipt, the name and address of the person from whom received, and the kind and quantity of drugs received; the kind and quantity of narcotic drugs produced or removed from process of manufacture, and the date of such production or removal from process of manufacture; and the record shall in every case show the proportion of morphine, cocaine or ecgonine contained in or producible from crude opium or coca leaves received or produced, and the proportion of resin contained in or producible from the dried flowering or fruiting tops of the pistillate plant Cannabis Sativa L., from which the resin has not been extracted, received or produced. The record of all narcotic drugs sold, administered, dispensed or otherwise disposed of, shall show the date of selling, administering or dispensing, the name and address of the person to whom, or for whose use, or the owner and species of animal for which the drugs were sold, administered or dispensed, and the kind and quantity of drugs. Every such record shall be kept for a period of two years from the date of the transaction recorded. The keeping of a record required by or under the Federal Narcotic Laws, containing substantially the same information as is specified above, shall constitute compliance with this section, except that every such record shall contain a detailed list of narcotic drugs lost, destroyed or stolen, if any, the kind and quantity of such drugs, and the date of the discovery of such loss, destruction or theft.

Labels, Containers, etc.—Sections 10, 11, 12 and 13 contain provisions of no particular interest to physicians.

Disposition of Seized Narcotic Drugs—Section 14 provides that narcotic drugs seized by enforcement officers, the lawful possession or title of which cannot be established, may be destroyed; on request, may be delivered to the state health officer for distribution or destruction; or may be delivered by the state health officer to charitable hospitals.

REVOCATION OF LICENSES

Conviction and Revocation of Licenses—Section 15 provides that on the conviction of any person of the violation of any provision of this chapter, a copy of the judgment and sentence be sent to the board licensing him, which board, if any, may then revoke his license. At the request of the State Medical Society, the legislature adopted a proviso that this section should not apply in the case of conviction to which the provisions of the Medical Practices Act apply, but in such case the conviction, the person, and the license shall be subject to the provisions of that Act.

Records Confidential—Section 16 provides that prescriptions, orders and records shall be open to inspection of proper enforcement officers but that

they shall keep such information confidential except in connection with prosecutions or revocation proceedings.

WEAPONS AGAINST ADDICTS, ETC.

Fraud and Deceit—Section 17 is one of the important sections of the act and provides federal and state enforcement officers with the authority to arrest addicts, raid dope dens, etc. Its provisions are as follows:

1. No person shall obtain or attempt to obtain a narcotic drug, or procure or attempt to procure the administration of a narcotic drug by fraud, deceit, misrepresentation, or subterfuge; or by the forgery or alternation of a prescription or written order; or by the concealment of a material fact; or by the use of a false name or the giving of a false address.

2. Information communicated to a physician or dentist in an effort unlawfully to procure a narcotic drug, or unlawfully to procure the administration of any such drug, shall not be deemed a privileged communication.

3. No person shall wilfully make a false statement in any prescription, order, report or record required by the act.

4. No person shall, for the purpose of obtaining a narcotic drug, falsely assume the title of, or represent himself to be, a manufacturer, wholesaler, apothecary, physician, dentist, veterinarian, or other authorized person.

5. No person shall make or utter any false or forged prescription or written order.

6. No person shall affix any false or forged label to a package or receptacle containing narcotic drugs.

Complaints, Indictments, etc.—Section 18 provides that the burden of proof of exceptions and exemptions is on the defendant.

Enforcement and Cooperation—Section 19 places enforcement of the chapter in the hands of the state board of health, all officers within the state and prosecuting attorneys, and makes it a duty for them to cooperate with Federal narcotic enforcement officers.

Penalties—Section 20 provides the following penalties: Conviction on first offense, fine not exceeding $200 or imprisonment for not exceeding three months or both; any subsequent offense, fine not less than $100 and not exceeding $1000 or imprisonment not exceeding five years or both.

Name of Act—Since the chapter is substantially the same as that enacted in many other states, it will be known and may be cited as the Uniform Narcotic Drug Act.

Effective Date—By its terms, this chapter of the statutes becomes effective until January 1, 1936.

Proceedings, House of Delegates, Ninety-Fourth Anniversary Meeting, State Medical Society of Wisconsin

TUESDAY EVENING SESSION

September 17, 1935

THE Ninety-Fourth Anniversary Meeting of the House of Delegates of the State Medical Society of Wisconsin was called to order at seven-thirty p. m. in the Schroeder Hotel, Milwaukee, Wisconsin, by the speaker, Doctor Gunnar Gundersen, La Crosse, Wisconsin.

Speaker Gundersen: The Ninety-Fourth Anniversary Meeting of the House of Delegates of the State Medical Society of Wisconsin will please be in order. On behalf of the Society, I wish to welcome you to this meeting.

Your Speaker and Secretary are charged with the duty of expediting the matters of business that must come before this session of the House. The delegates and alternates should keep in mind, however, that the floor is open to them at all times. A full discussion is required if the House is to accomplish the best results in the interest of the profession of the state. Just because you happen to be a new delegate, you should not remain silent. All delegates are striving to attain the same end and each discussion is welcome.

I wish to announce, however, to the end that no one may monopolize the time of the House, I shall limit the discussion to seven minutes. A member may gain permission to speak beyond that time by obtaining the consent of the House. To the alternates, may I say it has been the custom to open the floor to you for discussion even though the delegate be present. You will not vote at the time the delegate is present. For that reason, it is well for the delegate and alternate to sit together, so that the alternate may be apprised if the delegate leaves the room.

A member who is not a delegate or alternate may address the House by notifying the Speaker of his presence previous to or during the session.

We are particularly pleased to have with us tonight two principal officers of the Medical Society of a neighboring state. I present to this House and ask that he stand, so that we may all know him, the Secretary of the Minnesota State Medical Association, Dr. E. A. Meyerding of St. Paul.

I now present to you and ask if he will address you, the President of the Minnesota State Medical Association, Dr. W. A. Coventry of Duluth.

Dr. Coventry: I just want to bring to you the greetings from the state of Minnesota, as far as the

medical profession is concerned, and also to express our appreciation of having the privilege of coming here to attend the session, to see how you conduct your business.

Even this afternoon, at the first meeting of the Council, we learned considerably of what is going on in the state of Wisconsin. We also understand we will learn a great deal more this evening as to what goes on in the House of Delegates.

It is not very often, in the course of human events, that in the same year a President of a State Medical Society, in the state of Minnesota, comes from Duluth and the President of the State Medical Society of Wisconsin comes from Superior; cities that are separated only by a little creek.

Twenty-seven years ago, Dr. McComb of Duluth was president of the State Medical Society of Minnesota and Dr. Ground of Superior was president of the State Medical Society of Wisconsin.

The Society has been kind enough to invite me here, I think, largely in compliment to Dr. O'Leary. Our Society was glad to have Dr. O'Leary as our guest when we had our session. The two cities have had recent meetings, complimenting both of us. Only recently we had Dr. O'Leary with us on a pleasant boat trip on Lake Superior. At that time, the photographer for the paper was fortunate enough to get a very good picture of Dr. O'Leary and myself. It was my pleasure to have this enlarged and I hope Dr. O'Leary will keep it as a pleasant remembrance of our trip on Lake Superior. Probably none of us will be living when the next president of the Minnesota Society comes from Duluth at the same time that the President of the Wisconsin Society comes from Superior.

Speaker Gundersen: Thank you very much Dr. Coventry.

I wish to announce at this time the appointment of reference committees of the House as follows:

Credentials Committee
- H. H. Christofferson, Colby
- N. P. Anderson, La Crosse
- A. L. Myrick, De Soto

Committee on Standing Committees
- E. F. Schneiders, Madison
- C. W. Giesen, Superior
- H. J. Gramling, Milwaukee

Committee on Reports of Officers
- Francis D. Murphy, Milwaukee
- C. W. Henney, Portage
- T. J. Redelings, Marinette

Committee on Resolutions
- J. C. Sargent, Milwaukee
- D. J. Twohig, Fond du Lac
- A. E. McMahon, Glenwood City
- L. W. Hipke, Milwaukee
- F. E. Butler, Menomonie

I shall now call on Dr. H. H. Christofferson of Colby, Chairman of the Credentials Committee.

Dr. Christofferson: Your Committee on Credentials is pleased to report that there is at this time a registration of forty-five members in the House including nine Councilors. No questions have arisen relative to the seating of delegates or alternates. The committee has received a communication from Grant County in which the president states neither the delegate nor alternate will be here during the session. They suggest that Dr. Cunningham be seated as a delegate.

I, therefore, move that Dr. Cunningham be seated as a delegate from that county.

. . . The motion was seconded by Dr. Peterson of Sun Prairie and carried . . .

Dr. Christofferson: I now move the attendance record as compiled by attendance slips be made the roll of this House.

. . . The motion was seconded by Dr. Sisk of Madison and carried . . .

Speaker Gundersen: The Speaker will now entertain a motion to approve the minutes of the 1934 session of the House of Delegates as printed in the Wisconsin State Journal of December, 1934.

Dr. J. F. Mauermann (Monroe): I move the approval of the minutes of the 1934 session as printed in the Journal.

. . . The motion was seconded by Dr. Marsh of Madison and carried . . .

Speaker Gundersen: We will now hear reports of officers and committees. These reports have been published in our August Journal. I shall call upon officers and chairmen to summarize the reports and to make such additions as they may desire. The first is the Chairman of the Council, Dr. Arthur W. Rogers.

Chairman of Council

Dr. Rogers: I have nothing to add to the report as published in the last issue of the Journal. I would, however, like to make this remark, which I have had in mind for some little while.

A good business man rarely makes an investment unless he investigates pretty thoroughly the corporation or company in which he makes the investment. Yet we, as physicians of our State Society, continue year after year to invest our money in dues in the State Society of Wisconsin. I venture to say there are comparatively few men in the room, in spite of the fact they are delegates to the Society meeting, who have been in the offices of the State Society in Madison.

It seems to me it is not only a privilege but a duty for every man who has participated in the activities of our Society to take a day off and spend it there with Mr. Crownhart to gain some idea of what the company in which you are investing your money is doing. I think you owe it to yourself, to the public, and you certainly owe it to your Society. I hope in the time to come you will follow that suggestion. You will be more than surprised at the tremendous amount of work being done, and you will have more opportunity to discuss matters intelligently before your County Society.

Speaker Gundersen: We will hear next from our President, Dr. T. J. O'Leary of Superior.

The President

Dr. O'Leary: Mr. Speaker and Members of the House of Delegates:

In September, 1934, when I assumed office as President of this Society, I announced to you that I had no pet ideas to place before the Society for the coming year, as I felt the problems confronting the organization would furnish you with a sufficient amount of material to occupy your time. Conditions in reference to Medical Economics have been changing so rapidly during the past year that it would be unwise to advance or predict our social status.

At the present time, I am unable to state the relationship of organized medicine to the Social Security Act. Fortunately, I feel, there is a marked change in the economic relationship of our people, a condition that is divorced from relief standards. We are led to believe that our relationship to the Works Projects will be more satisfactory under the present set-up than it was under the C.W.A.

I am pleased to report to you the successful outcome of the activities of the Cancer Committee. I wish especially to commend the membership of this committee for the faithful work they have done in putting over the educational feature of their program. This being a legislative year and the session lasting eight months, the time of the officers has been taken up with duties made necessary by the activities of this session, constantly on guard to protect the public health and the profession. Details of this activity will be presented to you by the Secretary.

Last year, your retiring President dwelled at some length upon a proposal whereby the medical profession would enter into a field of public health. This has progressed to the state where we now have an organized unit ready to work under the name of the Wisconsin Health Council. The prospects of this unit were brightened at the last annual meeting of the State Board of Health, which meeting was attended by your Secretary and President. The Board of Health and the State Health Officer, Dr. C. A. Harper, graciously concurred in suggestions made by the Society. The first one of these has a direct relationship to the activities proposed by the Wisconsin Health Council.

1. A free appropriation of something over $8,000 will be used to employ a physician to act as a contact between the Board and profession in a manner contemplated under the formation of our Wisconsin Health Council. What this means, in fact, is that we will be able to initiate the work planned under the Council immediately and thereafter work out the details of organization so that by the time the Social Security funds are no longer available, we will be in position to take over the physician employed as the active director of our Health Council.

2. Funds available for additional work in the field of maternity and child welfare will include in large part postgraduate courses for physicians with particular emphasis upon rural areas.

3. Additional funds will be made available to carry forward the work of the investigator whose duty it is to weed out quackery in the state.

4. Other Social Security health plans will be submitted to the Society as they are formulated.

5. The Secretary of the Society is to be invited to all future meetings of the Board of Health.

Speaker Gundersen: The next is a report of the Secretary and Managing Editor.

The Secretary

Secretary Crownhart: Dr. Reginald Jackson, Chairman of the Committee on Public Policy, is necessarily absent tonight. So that at this time the Secretary will present additions to both the report of the Committee on Public Policy and the Report of the Secretary.

The report of the Secretary-Managing Editor appeared in the August issue of your Journal. In these four and a half pages of printed report, your Secretary discussed in some detail the Journal, progress in Scientific Work, Care of the Indigent, the Works Progress Administration, Medical Relationships, the Social Security Bill, Public Education, our contacts through the Wisconsin Hospital Association, Sickness Insurance, Legislation, the general office duties, travel, and concluded with four recommendations for the consideration of this House. A week ago, this report was supplemented by a statement concerning the disposition of the resolution introduced a year ago by Dr. Hipke of Milwaukee.

As a further supplementary report, your Secretary is pleased to be able to advise you that the membership of your Society tonight is 2,115 as compared to 2,140 for the complete calendar year of 1934. It becomes evident that our membership this year will reach its highest figure, probably in excess of 2,200.

During nine of the twelve months that have elapsed since our Green Bay meeting, the Wisconsin Legislature has been in session and is in session as we meet here tonight. In the September issue of your Journal, there appeared a seventeen-page printed report on the then status of upwards of one hundred and thirty measures affecting medicine and the public health which had been introduced in this session.

It is a great source of satisfaction to your officers to be able to report to you tonight that our record of earlier years remains standing; that since 1923 no bill opposed by your Society has become a law. This high record of service to the joint interests of the people and profession has been possible of accomplishment only because we have ever placed uppermost in our legislative activities the ultimate public interest and because at our every call, no matter the hour, no matter the weather, no matter the frequency, we have had the most immediate and cordial support of members throughout this state. Your Secretary will ever hold in grateful appreciation this splendid response.

In the reports of officers and committees placed before you tonight, there is presented in great detail the work of your Society during the year past. Should members have questions arising out of these reports or concerning matters not therein discussed, none should hesitate to present them that each may have the fullest possible information concerning past activities in order to frame the policies that shall guide us in the year to come.

Finally, your Secretary spent last Friday in conference with officers of the American Medical Association. In discussing questions concerned with eligibility of membership, recourse was had to the Constitution and By-Laws of your Society. While these are, in fact, the model prepared by the parent organization just a few years ago, it was discovered that the section of the Constitution that concerns itself with election and terms of officers stood in need of clarification from a legal viewpoint. Your Secretary presents at this time, to lie upon the table for action in 1936, the apparent needed restatement of Section 2 of Article IX of the Constitution. There is no change in substance of this section, the change is as to wording only.

Proposed Amendment to the Constitution

Amend Sec. 2 of Article IX of the Constitution to read:

Sec. 2. The officers shall be elected for the terms and in the manner following:

A. President-Elect. The president-elect shall be elected annually at the last regular session of the House of Delegates to take office as President at the concluding general session of the following annual meeting.

B. Speaker and Vice-Speaker. The speaker and vice-speaker shall be elected annually at the last regular session of the House of Delegates to take office immediately upon election.

C. Councilors. The terms of councilors shall be for three years. As nearly as possible, one-third of the members of the Council shall be elected each year.

D. Secretary and Treasurer. The secretary and the treasurer shall be elected annually by the Council at its first session after the first of each year.

E. All of these officers shall serve until their successors are elected and installed.

May I again state that in this proposed amendment the purpose is to clarify the Constitution from a legal standpoint and no change in substance is there included.

Speaker Gundersen: We will now have the report of the Treasurer, Dr. Rock Sleyster.

The Treasurer

Dr. Sleyster: Mr. Speaker and Members of the House of Delegates: The accounts of the Treasurer are carried in two different funds, the general fund and the fund set up for medical defense.

TREASURER'S REPORT

STATE MEDICAL SOCIETY OF WISCONSIN

as of September 16, 1935

	General Fund	Medical Defense Fund
Balance January 1, 1935	$ 574.79	$ 1,017.42
Receipts:		
Membership dues	$24,911.59	1,878.00
Interest on Investments	936.39	370.00
Rental of Exhibit Space	755.00	
Refunds	14.97	
Beloit Water, Gas & Elec. Bond called	1,029.65	
North American Bonds sold		1,695.29
Total Receipts	$27,647.60	3,943.29
Total	$28,222.39	$ 4,960.71
Disbursements:		
Expenses, Sundry	$23,224.33	
Robert R. Freeman, attorney		1,544.19
Bonds purchased		1,970.00
Total Disbursements	$23,224.33	3,514.19
Cash on deposit as of September 16, 1935	$ 4,988.06	$ 1,446.52

Summary of Funds

General Fund:	
Bank Balance September 16, 1935	4,998.06
Investment Securities	24,000.00
	$28,998.06
Medical Defense Fund:	
Bank Balance September 16, 1935	$ 1,446.52
Investment Securities	11,000.00
	$12,446.52

Investment Bonds

General Fund:	Interest Rate	Maturity	Face Value	Quoted Value
Dane County Poor Relief	3 %	4-1-40	$ 1,000.00	$ 1,035.00
N.Y. State Elec. & Gas. Corp.	4½ %	3-1-80	1,000.00	1.051.30
St. Joseph's Congregation	5 %	5-1-48	1,000.00	900.00
Wis. Pwr. Lt. & Heat	5 %	6-1-46	1,000.00	1,020.00
Canadian National Ry.	5 %	10-1-69	2,000.00	2,297.60
Milwaukee Gas Light Co.	4½ %	3-1-67	2,000.00	2,122.60
T.M.E.R. & L. Co.	5 %	6-1-61	2,000.00	1,995.00
Wis. Public Service Co.	5 %	1-1-42	3,000.00	3,195.00
American Tel. & Tel. Co.	4 %	3-1-36	4,000.00	4,080.00
Northern States Power Co.	5 %	4-1-41	4.000.00	4,275.20
City of Milwaukee School	4½ %	1-1-36	2,000.00	2,020.00
City of Milwaukee School	4½ %	1-1-37	1,000.00	1,010.00
Total			$24,000.00	$25,001.70

Medical Defense Fund:				
Milwaukee County Sewer	4½%	3-18-44	$ 1,000.00	$ 1,130.00
Wisconsin Gas & Elec. Co.	5 %	6- 1-52	1,000.00	1,060.00
Pacific Tel. & Tel. Co.	5 %	1- 2-37	1,000.00	1,062.50
Bell Tel. of Canada	5 %	3- 1-55	2.000.00	2,287.60
Commonwealth Edison	4½%	7- 1-57	2,000.00	2,200.00
U. S. Treasury Bonds	3¼%	1944- 46	2.000.00	2,095.00
So. California Edison Co.	3¾%	5- 1-60	2,000.00	1,965.00
			$11,000.00	$11,800.10

The Investment Securities of the Society, under arrangement made about a year ago, are held for safekeeping by the First Wisconsin Trust Company of Milwaukee. The coupons are clipped by them and handed to the Treasurer. The securities are not handled by any one else. The list of bonds are published in the Journal. It must be remembered that these bonds have been purchased and handled over a period of about twenty-five years. The bonds in the General Fund have a face value of $24,000. Last Saturday I had an appraisal made by the Securities Company of Milwaukee, showing a market value last Saturday of $25,001.70. The Medical Defense fund bonds have a face value of $11,000. They were appraised last Saturday as having a market value of $11,800.10. So the total holdings of the Society in investment securities have a face value of $35,000 and a market value of $36,801.80, $1801.80 above par.

Speaker Gundersen: The next order of business is the report of the Committee on Necrology.

Secretary Crownhart: The report of the Committee on Necrology was published in the August issue of the Journal. In addition to the report therein contained, we have the following report to make:

The following non-members: Dr. Lester M. Brooks, Milwaukee; Dr. J. W. Burns, Appleton, Dr. Robert A. Kitto, Racine.

The following members: Dr. L. H. Pelton, Waupaca, Dr. Louis F. Jermain, Milwaukee, Dr. Anthony J. Caffrey, Milwaukee, Dr. A. E. Mieding, Milwaukee, Dr. Frank A. Southwick, Stevens Point, Dr. W. G. Riopelle, Beaver Dam.

Speaker Gundersen: This is read for your approval.

Dr. Peterson (Sun Prairie): I move we accept the report.

. . . The motion was seconded by Dr. Francis Murphy of Milwaukee . . .

Speaker Gundersen: The report will be adopted by a rising vote. In honor of the deceased members, will the delegates please remain standing until the gavel falls. (The members of the House arose and paid silent tribute to the deceased members.)

The next order of business is the report of the Committee on Health and Public Instruction, Dr. H. C. Christiansen of Superior, Chairman.

Dr. Christiansen: I have nothing further to report.

Speaker Gundersen: The Committee on Medical Education and Hospitals, Dr. J. W. Prentice of Ashland. (not present)

The Committee on Medical Defense, Dr. A. J. Patek of Milwaukee.

Medical Defense

Dr. Patek: Let me take you back to a period of almost three decades ago—twenty-seven years to be exact, at a time when I was acting as Editor of the *Wisconsin Medical Journal.* What occurrence it was that prompted the thought that our medical profession would be better protected if its own members banded themselves together in defense of their legal difficulties, I cannot now say nor recall. It is presumed that the fact that four states, New York, Pennsylvania, Maryland, and Illinois had this plan in successful operation, many have motivated us to do likewise. In any event, 1908 saw us in action, and with few formalities, and the help of an able attorney, Willet Spooner, who had a sympathetic interest in the medical profession, we launched forth to offer the weight of the entire Society's support to those of its membership who wished to avail themselves of this help, at a very nominal—I may say—insignificant cost.

From time to time I have submitted a statistical resumé of our work to the House of Delegates, the last detailed record, comprising all that had been accomplished to date, having been presented at the 1926 Annual Meeting of the Society. Although there have been some changes in the personnel of our Counsel, the work has suffered but little—with the possible exception of a short period during Mr. Spooner's illness. He was ably succeeded by Mr. Robert R. Freeman who served until he left the city by reason of ill health. Mr. Ralph Hoyt then took charge until his removal from the city, and Mr. Freeman, having in the interval returned to Milwaukee, again gladly assumed the task he had relinquished five years previously. And now Mr. Ralph Hoyt has once more been chosen to succeed Mr. Freeman who has resigned in order to devote himself to a specialized branch of the law.

With the help of Mr. Freeman's associate, Mr. Drechsler—we have now brought our case records to date, and our files are complete with details of all transactions on our books. These files are accessible at any time, but in order to place this statistical record before you in easily assimilable form, I have prepared a number of slides indicating, in brief summaries, the types of cases we have handled, and their disposition.

REPORT OF MATTERS SUBMITTED TO MEDICAL DEFENSE ATTORNEYS

(As of July 20, 1935)

Total—1908 to date		272
Total cases	258	
Legislative matters	5	
Opinions	9	
		(272)

Outcome

Cases won		217
By Court Action	54	
By Dismissal	105	
By No Action	58	
Cases Lost		8
Cases Pending		5
Other Insurance		18
Refused		10
Total		258

Cases Are Classified Under Following Headings

Improper and Negligent Medical and Surgical Diagnosis and Treatment	97
Improper Treatment of Fractures	68
Improper Treatment: Needless Amputation	5
Responsibility for Development of Postoperative Hernia	3
Responsibility for Death from Anaesthetic	5
Leaving Foreign Body in Wound after Operation	6
X-ray Burn	10
Improper Treatment of Newborn	5
Improper Diagnosis in Case of Insanity	1
Improper Treatment of Mastoid Disease	4
Improper Treatment of Confinement	13
Miscellaneous	41
	258

SUMMARY OF CLASSIFIED ANALYSIS

(As of July 20, 1935)

Improper and Negligent Medical and Surgical Diagnosis and Treatment			97
Cases Won		89	
By Court Acation	21		
By Dismissal	42		
By No Action	26		
Cases Lost		1	
Cases Pending		2	
Other Insurance		4	
Refused		1	
Improper Treatment of Fractures			68
Cases Won		57	
By Court Action	15		
By Dismissal	31		
By No Action	11		
Cases Lost		4	
Cases Pending		2	
Other Insurance		3	
Refused		2	
Improper Treatment: Needless Amputation			5
Won by Court Action		3	
Won by Dismissal		1	
Won by No Action		1	
Responsibility for Development of Postoperative Hernia			3
Won by Dismissal		1	
Won by No Action		2	
Responsibility for Death from Anaesthetic			5
Won by Court Action		4	
Won by Dismissal		1	
Leaving Foreign Body in Wound After Operation			6
Won by Court Action		2	
Won by Dismissal		4	
X-ray Burn			10
Cases Won		8	
By Court Action	2		
By Dismissal	3		
By No Action	3		
Pending		1	
Lost		1	
Improper Treatment of Mastoid Disease			4
Cases Won		3	
By Court Action	1		
By Dismissal	2		
Other Insurance		1	
Improper Treatment of Confinement			13
Cases Won		10	
By Court Action	3		
By Dismissal	6		
By No Action	1		
Other Insurance		1	
Refused		2	
Miscellaneous			41
Cases Won		28	
By Court Action	2		
By Dismissal	13		
By No Action	13		
Other Insurance		8	
Refused		5	
Cost—5/1/30 to 7/20/35—63 matters			$5007.75
Average Cost per Case	$ 98.83		
Highest Cost—in 1	563.33		

My one regret has always been that it has not been possible to enroll our entire membership in this league for mutual defense. Perhaps the statistical matter I have presented to you may serve to convince those members of the Society, not yet enrolled, that they are depriving themselves of a worthwhile State Society perquisite that offers valuable benefits at a cost of but two dollars per year.

It is only fair to state that there has been expressed, at rare intervals, objection to the Society's blanket protection of its members. To quote a paragraph from my 1926 report to this House:

"Far be it from our purpose to claim that there may not be serious objection to our occasionally entering into the defense of individual, perhaps unmerited cases. Be this as it may, your Committee has from the beginning had the conviction that the general principle of defense by the majority, for the majority, will develop a favorable esprit de corps amongst the profession; also that, even though in an occasional instance doubt may be cast upon the morality of offering defense, so disproportionate are these negative instances that the large honest group that has asked for and been given successful help speaks eloquently for the unquestioned morality of the issue."

This must still remain our defense in the face of criticism. But if more were needed, the words of commendation from any who have been given help, and the records of achievement which I have shown you, should suffice to justify the continuance of this beneficent institution.

In my report of July, 1928, to this body, there appears this paragraph:

"Your Defense Committee has felt that it should, through the medium of your Journal, endeavor to get into closer touch with the members; that it should advertise its wares in the sense of putting before them, from time to time, interesting and worthwhile data concerning litigations; stress the points upon which such suits are predicated; show, in individual cases, how much that forms a basis for suits could be avoided; emphasize the legal points involved, and draw helpful deductions. We purpose in this way to familiarize our members with the character of defense that is being offered them; to acquaint them, by means of case reports, with intimate data that they cannot but find interesting and valuable; and shall dilate upon whatever facts are pertinent in an endeavor to emphasize the legal structure upon which all medical defense is built and upon which medical practice must depend for its safety from unjust and misguided attack."

While this was an intention expressed, it has proved but a hope deferred, and has remained unacted upon. I believe, however, that reports of cases, or the progress of cases, with explanatory data regularly contributed to the Journal as a separate column, would carry much weight with our readers, and it is my purpose to petition the editors of the Journal for the inclusion of such a department in an early issue, if, as, and when space permits.

Having been intimately identified with this State Society venture since its birth, my pride in its success may be ascribed to prejudice. I shall leave this record of achievement with you. If, in your judgment, Medical Defense by the State Society is a meritorious institution, I would ask that your efforts be spent toward a larger enrollment. A solid phalanx is a great force; and a profession united in and for its own proper protection against unjustified imposition, offers a moral bulwark that should prove an inestimable boon.

Speaker Gundersen: The next is a report of the Editorial Board. (The members of the Editorial Board were not present)

The next is a report of the Committee on Cancer, Dr. Stovall.

Dr. Stovall: The committee has nothing to report further than that which has been published, except it gives me an opportunity to emphasize something on behalf of the report of that committee. Last year, the President, in addressing this House, said they were expecting activity from the committee. I think when you read the report you will realize we have had a very active and successful year. Our cancer clinics, conducted this summer, were highly successful.

Speaker Gundersen: The next is the Committee on Coordination of Medical Services, Dr. F. E. Butler of Menomonie.

Dr. Butler: The committee has no further report to make.

Speaker Gundersen: The Committee on Scientific Work, Dr. John O. Dieterle of Milwaukee.

Dr. Dieterle: The committee has nothing further to report.

Speaker Gundersen: The next is the report of delegates to the American Medical Association, Dr. Joseph F. Smith of Wausau.

Delegates to A.M.A.

Dr. Smith: Mr. Speaker and Members of the House of Delegates: I have chosen to present what matter I have in rather an informal way instead of a written report, so the material presented may be a little more flexible from the standpoint of time and also from the standpoint of material selected.

The House of Delegates of the 1935 session met at Atlantic City on the 10th, 11th and 13th of June, remained in session the whole day on Monday and Tuesday, the 10th and 11th, and on Thursday afternoon.

One of the resolutions adopted urged the Council on Medical Education and Hospitals to continue their effort to have a course on medical economics included in the curriculum of all medical colleges. This resolution was adopted.

Another matter related to medical broadcasting, that the subject of broadcasting from stations in foreign countries material that is false or misleading be brought to the attention of the Federal Communications Commission to the end that such broadcasting can be corrected in some way.

Another measure asked for a committee working under the Council of Pharmacy and Chemistry to investigate the preparation of catgut and formulate standard rules for the preparation of surgical catgut. This resolution came from the delegation from New York and they seemed to think it was rather important.

Under another resolution adopted the Board of Trustees was asked to appoint a special committee to study the subject of contraception and report at the 1936 session. This matter has been presented in one form or another for several years. Inasmuch as it has appeared in the halls of Congress, the House felt it deserved some official consideration at the hands of the Board of Trustees.

Relating to the matter of Medical Economics, a number of years ago and in fact every year for several years this subject has been up in some form. Some years ago, a resolution was passed asking the Board of Trustees to appoint or establish a Bureau of Economics. This was done and Dr. Leland was put at the head. Dr. Leland has been working along for several years collecting material on this subject. The House of Delegates, at the Cleveland session in 1934, discussed this subject and laid down certain principles which it felt should govern in the field of medical service. I shall read those principles because they were reaffirmed by a special session of the House of Delegates held at Chicago last winter and again this summer.

1. All features of medical service and any method

of medical practice should be under the control of the medical profession. No other board or individual is legally or educationally equipped to exercise such control.

2. No third party must be permitted to come between the patient and his physician in any medical relations. All responsibility for the character of medical service must be borne by the profession.

3. Patients must have absolute freedom to choose a legally qualified doctor of medicine who will serve them from among those qualified to practice and who are willing to serve.

4. The method of giving the service must retain a permanent confidential relation between the patient and a family physician. This relation must be the fundamental and dominating feature of any system.

5. All medical phases of all institutions involved in the medical service should be under professional control, it being understood that medical and hospital service should be considered separately. These institutions are but expansions of the equipment of the physician. He is the only one the law of all nations recognizes as competent to use them in the delivery of service. The medical profession alone can determine the adequacy and character of such institutions, on their operation according to medical standards.

6. In whatever way the cost of medical service may be distributed, it should be paid for by the patient in accordance with his income status and in a manner that is mutually satisfactory.

7. Medical service must have no connection with any cash benefits.

8. Any form of medical service should include within its scope all legally qualified physicians of the locality covered by its operation who wish to give service under the conditions established.

9. Systems for the relief of low income classes should be restricted to those below the "comfort level" standard of income.

10. There should be no restrictions on treatments or prescribing not formulated and enforced by the organized medical profession.

These principles were laid down as the general principles which should govern any scheme of medical economics which might be adopted. They were adopted at the Cleveland session. Last winter, it was announced that the administration at Washington contemplated, as a part of the Social Security program, the inclusion of some scheme for health insurance, and accordingly a special meeting of the House of Delegates was called to meet in Chicago in February, it being the feeling that perhaps a scheme of that sort might be put through Congress without sufficient knowledge on the part of the members of Congress and might be an ill-advised piece of legislation.

This matter was discussed in Chicago for two days. All the different phases of it were discussed and the upshot of the meeting was these principles that were laid down at Cleveland were reaffirmed.

At the Atlantic City session the Bureau presented about 200 plans that had been digested by the Bureau and gave its report. The Atlantic City session spent the better part of two days discussing this in detail again and finally came to the conclusion, as nearly as anyone could, that in our present state of knowledge it is impossible to lay down any scheme of health insurance which will be adapted to all groups, in all different stages of life. That if any scheme is finally worked out it will have to be a flexible scheme. Perhaps one scheme will work in one community and not in another. Therefore, there must be a wide variety of different plans worked so that some of these can be adapted to the peculiar needs of individual communities.

The House of Delegates recommended that the Bureau of Economics of the American Medical Association help the various societies and through them the county societies in working out any sort of scheme for health insurance in any locality in which they feel that such a plan is necessary and workable.

So, as the matter stands at the present time, it means that any local organization, county medical society, desiring to enter upon some scheme of this sort should contact the State Society and through them the American Medical Association, present the plan they have in mind and then ask the advice and consideration of the Bureau of Economics and the State Medical Society as to whether or not such a plan is feasible and workable. Until some more definite plan can be devised, it seems that is the line along which we will be obliged to work.

Speaker Gundersen: The next report is that of the Committee on Medical History, Dr. F. Gregory Connell of Oshkosh, chairman.

Dr. Connell: There is no further report.

Speaker Gundersen: I shall now call on the Secretary.

Executive Session

Secretary Crownhart: Under the heading of the report of the Committee on Medical Economics, they have a supplementary report they would like to have the Secretary read and would like to go into executive session to hear that report. May we have a motion to that effect?

Dr. Butler (Menomonie): I so move.

. . . The motion was seconded by Dr. Irwin of Baraboo and carried . . .

Secretary Crownhart: The Secretary will call on the office force and Mr. Wiprud to act as sergeants-at-arms for the House if that meets with your pleasure. Any member not a delegate or alternate may remain in the session, provided he is identified by someone wearing a badge. I think, Mr. Speaker, it may simplify the procedure if the Secretary reads the report, and directly thereafter copies will be ready for distribution.

Not only the members of the House of Delegates but all members of the Society in this room are

asked by the committee to consider this material in confidence and to be very careful of the reports that are going to be distributed. They involve some major suggestions of the committee which the committee has considered for many months, which the committee considered with the Council today, and which suggestions it now presents to you for your consideration.

SUPPLEMENTARY REPORT OF THE COMMITTEE ON MEDICAL ECONOMICS

To the 1935 House of Delegates:

Officers of the Society and members of your Committee on Medical Economics have been studying throughout the year various proposals submitted from within and without the membership. We have also watched with pleasure the favorable progress of Bill 733A and its enactment into law as Chapter 350 of the Laws of 1935. In view of this recently enacted legislation and other material on which our studies have been completed, we have the following supplementary report and recommendations.

1. *Care of the Indigent.* At the 1930 session of your House of Delegates, in acting favorably upon the report of the Special Committee on the Distribution of Medical Services, the House accepted the following formal statement:

"The care of the indigent is a community obligation. The physician should receive a reasonable compensation therefore and that charitable work that will always characterize the profession of medicine should be continued to that class of individuals who are endeavoring, under great handicaps, to maintain their independent financial status.

"The Society disapproves any system which provides a single practitioner to care for the indigent, except such as may be in institutions, for the reason that such a system is not conducive to securing a proper public service.

"We recommend that each component society investigate in the light of its own peculiar requirements, those plans and suggestions advanced to provide a better service for the indigent sick."

One of the reasons for difficulty in perfecting arrangements between component county societies and county governments for the care of the indigent sick was the failure of the charter law of the State Medical Society definitely to grant to the Society and its component groups power to enter into such contracts. Contracts were entered into by three component societies after careful wording by legal counsel of the Society but lack of definite authority was not conducive to securing that attention and cooperation of the public which otherwise might have been had.

Chapter 350 of the Laws of 1935 states:

"(148.01) (3) The State Society, or a county society in manner approved by the State Society, may undertake and coordinate all sickness care of indigents and low income groups, through contracts with public officials, and with physicians and others, and by the use of contributions, cooperative funds and other means, provided only that free choice of physician within such contracts shall be retained and that responsibility of physician to patient and all other contract and tort relationships with patients shall remain as though the dealings were direct between physician and patient."

It is impressed upon your committee that while free choice of physician was a guarantee of the Federal Government under the Federal Emergency Relief Administration there is already manifest a tendency among county governments to abandon this principle whenever federal relief funds withdraw from the picture. The fact that the principle of free choice was recognized and made mandatory under the Relief Administration in Wisconsin is plainly indicative of the fact that such reasonable free choice was recognized to be fundamental to any degree of proper service to the indigent.

Whether care of the indigent be financed from federal, state or local funds, jointly or singly, your Committee contends that the principle of free choice of physician should be maintained for all time in the future.

Your Committee recognizes that large numbers of county governments in this state are in a period of financial stringency and that any original future agreements between county medical societies and county governments for the care of the indigent must be at rather nominal figures. The wise and safe policy for each County Medical Society to pursue is to establish, through frequent conferences and cooperative efforts, friendly relations with poor relief officials to acquaint them with the better medical service to be had by the adoption of the principle contained in Chapter 350, Laws of 1935.

It is desirable and important that frequent conferences be held by the representatives of component County Medical Societies with relief officials in an effort to establish local medical relief programs mutually agreeable to physicians and relief officers and advantageous from the viewpoint of medical service to the indigent.

Recognizing that with the gradual withdrawal and contraction of the federal relief program, local governmental units again gradually will assume direction of local programs for the care of the indigent sick, we recommend that: The House reaffirm its quoted statement of 1930 as representing its continued position on the subject of care of the indigent.

2. *Care of the Indigent Sick,—Types of Contract.* To enable any county medical society to enter upon the proper contract, the Secretary of the State Medical Society is hereby instructed upon request to provide such component society with such contract form as may be necessary to comply with local conditions as stated by officers of such component society.

No such contract shall be entered upon except under the provisions of Chapter 350 of the Laws of 1935.

3. *Care of Low Income Groups,—Social Service.* Your Committee recognizes that in some few of the larger cities of the state it may seem advisable to the local medical profession, as represented in a component county medical society, to establish a local agency wholly under the control of the component society for the sole purpose of enabling physician and patient to make such credit arrangements, based upon social service investigation, as will assist low income groups to secure needed medical service at a cost within their means to meet. The type of bureau here contemplated is one which will render to the patient only budgeting suggestions and to the physician only credit information that the physician may give all needed service to the patient at a cost within the means of the patient to afford out of his own resources.

Your Committee feels that the House may well endorse at this time the principle of such service for large population areas wherein such social service bureaus may be contemplated. The Committee believes, however, that specific plans should be submitted to the Council in order that each component society may have the benefit of their constructive advice and aid.

3a. *Care of Low Income Groups—Consulting Service.* In the event that component societies submit plans for the distribution of medical service under the terms of Chapter 350, Laws of 1935, your Committee recommends that the Council, or Executive Committee thereof, specifically be authorized to employ on a per diem basis competent physicians or laymen to investigate the needs and feasibility of the specific plan under discussion, reporting their findings to the Council. The purpose of this recommendation is to grant to the Council broad powers for investigating the public service to be attained under any plan brought forward.

3b. *Care of Low Income Groups by Other Than State or Component Society Plans.* Your Committee recommends to the House that inasmuch as the legislature has enacted Chapter 350, Laws of 1935, the House adopt the following formal statement:

The Society disapproves the inauguration or operation of any plan providing for the care of low income groups by practitioners not representing the State Society or a component County Medical Society in a manner approved by the State Society.

4. *Distribution of Medical Service.* Recognizing that the Society, under Chapter 350 of the Laws of 1935, can best serve the public interests not only by concerted action but by continuous cooperative effort, your Committee recommends that the House amend the By-Laws to prevent any member from conducting himself in a manner which tends to defeat or does defeat the public purposes for which the Society is organized and is operated.

To accomplish this recommendation the Committee recommends the adoption of the following restatement and amendment to the By-Laws.

Amend the first paragraph of Section 3, Chapter XI of the By-Laws so as to read as follows:

Section 3. Each county society shall judge of the qualifications of its members, subject to review and final decisions by the Council of the State Society. Every reputable and legally qualified physician who is a bona fide resident of the same county shall be eligible to membership so long as he does not practice nor profess to practice sectarian medicine, or engage in practice in a manner in conflict with the Principles of Ethics of the American Medical Association,* *or so conduct himself as to defeat or tend to defeat the purposes for which the Society is organized and is operating.**

4a. *Distribution of Medical Service, Approval of Plans.* Recognizing that the several component societies may wish to consider other plans for the distribution of medical services under the terms of Chapter 350 of the Laws of 1935, your Committee recommends that the House formally designate the Council of the Society, with power to approve or disapprove, in the name of the Society, such plans under the law stated.

5. *Distribution of Medical Services—Public Knowledge.* While it has long been the self-imposed obligation of the profession of medicine to furnish medical service to all at a cost within their individual means to meet, as result of continuous propaganda over many years by those who seek to tear down the standards of scientific medicine, there is today prevalent among some of the laity the thought that the services of medicine are only to be secured at a fixed price.

To the end that organized medicine may continue most effectively to discharge its obligations to the public and profession alike, your Committee submits herewith a proposed official announcement to be furnished to each member of the Society upon his own request. The Committee also submits a proposed credit form to accompany this announcement.

The purposes of both largely will be evident upon their face and your Committee reserves for floor discussion statements to amplify in full detail this suggestion.

Respectfully submitted,

COMMITTEE ON MEDICAL ECONOMICS,
Paul Fox, M.D., Beloit, *Chairman,*
R. G. Arveson, M.D., Frederic.

Note: The third member of the Committee, Dr. W. G. Riopelle, of Beaver Dam, did not participate in this report because of his serious illness and subsequent death.

Secretary Crownhart: Your Secretary desires to elaborate upon this report in accordance with the Committee's instructions. In connection with this form, which is going to be presented to you in a moment and the credit blank which accompanies it, the Committee wishes to bring to your attention this thought. Apparently there is prevalent a growing impression among the laity as a result of this very vigorous propaganda that there are medical services

* New material.

to which they are entitled as American citizens which they cannot secure because they have not the money with which to purchase them. Your committee feels this is the basis and the fundamental basis upon which all propaganda compulsory health insurance is conducted.

An employe of the President's Committee on Economic Security who perhaps more than any other one lay person, and representing the Foundation as he did, influenced the drafting of the report of the President, said following the presentation of the report to the President, in an address before the Academy of Political Science that " if we will admit that proper medical service is necessary to the continued health and well-being of the American citizens and if we will admit, as we must, that there are many who cannot secure such service." I stop to point out that this assertion is their foundation for seeking health insurance.

Your Committee on Medical Economics, cognizant of the fact that 150 high schools of Wisconsin who belong to the Debating League in this state and high schools in other states, are to continue this discussion this winter by debating the subject of whether sickness aid through medicine and other sources shall be provided the American people by state legislation at public expense, and that presumably many of the 350 high schools that do not belong formally to the Debate League will likewise debate the same identical question, feel that this false assertion certainly is going to be placed before the public of Wisconsin this year and the public of Minnesota and other states as it has never been placed before them heretofore.

Again the committee felt that the whole basis for the argument for change is fundamentally on contended fact that the people cannot secure medical service. The proposed form submitted and the credit blank accompanying it is nothing other than a restatement in the committee's mind of those principles of medicine which have always prevailed. The main indication for it, if you wish to adopt it, is that it will blast from under these propagandists the false foundation upon which they place their arguments.

. . . The copies of the supplementary report of the Committee on Medical Economics, together with Exhibits A and B, were distributed to the members of the House of Delegates . . .

Speaker Gundersen: Dr. Fox, do you wish to continue the report of the Committee?

Dr. Fox: Mr. Speaker, I think our Secretary has explained the report very well. I merely want to impress upon you the importance of organized medicine. We have had this in mind very much in preparing this report, as manifested by the fact that no one can enter into any kind of contract to practice medicine except as a county society or ratified by the county society.

The American Medical Association has taken the stand they should not formulate any plan which would be universal. It seems to me that is the proper attitude to take. At the same time, I think we should all consider that any plan of ours should be ratified by our mother society rather than to go on our own independently. We have had very serious examples of this mistake in heterogeneous contracts in the Northwest.

I think this report should be discussed perhaps in two parts, that pertaining to the contract part, so to speak, and that with reference to the credit part. I hope you will feel free to discuss it in frank manner.

Secretary Crownhart: Mr. Speaker, it is the suggestion of the Secretary we withhold the discussion while we continue with the regular business of the House of Delegates. While the formal discussion would be tomorrow night, we may open it for discussion later this evening.

Speaker Gundersen: These reports are now referred to the respective reference committees of the House. The Committee on Reports of Officers will consider the reports of the Chairman of the Council, the President, the Secretary-Managing Editor and the Treasurer. The Committee on Reports of Standing Committees will consider all other reports except that on Necrology, which has been adopted.

The House will now proceed to the election of a Committee on Nominations. In accordance with precedent, I shall ask the Secretary to read the names of the societies in each councilor district. As they are read, the delegates will rise and at the conclusion nominate one from among themselves to represent their district on the committee. At the conclusion of the nominations, the Speaker will entertain a motion to declare the nominees to be the choice of the House.

I would like to make an announcement from the seventh district that Dr. Spencer Beebe of Sparta, whose term expires as councilor, feels as a matter of policy a councilor should not sit for more than two terms. He has been a councilor for two terms and is not a candidate for re-election.

Nominating Committee

Secretary Crownhart: Mr. Speaker, The committee on Nominations will meet after the session of this House in a room that has been reserved for their use to arrange a time for their formal meeting tomorrow morning. This committee brings to the House of Delegates on Thursday morning their considered recommendations and nominations, one or more, for the office of President-Elect, Speaker and Vice-Speaker of the House and one delegate and alternate to the American Medical Association as well as selecting a place for the 1936 annual meeting.

Your Secretary will now announce the districts in order and will the delegates from the county societies affected please rise and among themselves nominate one to be a member of this Committee.

First District: Dodge, Jefferson and Waukesha County Societies.

. . . H. A. Peters of Waukesha County was nominated . . .

Second District: Kenosha, Racine and Walworth County Societies.

. . . H. B. Keland of Racine County was nominated . . .

Third District: Dane, Columbia, Green, Rock and Sauk County Societies.

. . . J. Newton Sisk of Madison was nominated . . .

Fourth District: Crawford, Grant, Iowa, La-Fayette and Richland County Societies.

. . . W. Cunningham of Platteville was nominated . . .

Fifth District: Calumet, Manitowoc, Washington–Ozaukee and Sheboygan County Societies.

. . . A. C. Radloff of Plymouth was nominated . . .

Sixth District: Brown–Kewaunee–Door, Outagamie, Fond du Lac and Winnebago County Societies.

. . . D. J. Twohig of Fond du Lac was nominated . . .

Seventh District: Juneau, La Crosse, Monroe, Trempealeau–Jackson–Buffalo and Vernon County Societies.

. . . N. P. Anderson of La Crosse was nominated . . .

Eighth District: Marinette–Florence, Oconto and Shawano County Societies.

. . . T. J. Redelings of Marinette was nominated . . .

Ninth District: Clark, Green Lake–Waushara–Adams, Lincoln, Marathon, Portage, Waupaca and Wood County Societies.

. . . H. H. Christofferson of Colby was nominated . . .

Tenth District: Barron–Washburn–Sawyer–Burnett, Chippewa, Eau Claire–Dunn–Pepin, Rusk, Polk and Pierce–St. Croix County Societies.

. . . W. C. Henske of Chippewa Falls was nominated . . .

Eleventh District: Ashland–Bayfield–Iron and Douglas County Societies.

. . . C. W. Giesen of Superior was nominated . . .

Twelfth District: The Medical Society of Milwaukee County.

. . . H. J. Gramling of Milwaukee was nominated . . .

Thirteenth District: Forest, Price–Taylor, Langlade and Oneida–Vilas County Societies.

. . . W. S. Bump of Rhinelander was nominated . . .

Speaker Gundersen: I shall now entertain a motion to declare the nominees to be the choice of the House.

Dr. McMahon (Glenwood City): I so move.

. . . The motion was seconded by Dr. Marsh of Madison and carried . . .

Secretary Crownhart: Mr. Speaker may we now rise from Executive Session?

Dr. Peterson (Sun Prairie): I so move.

. . . The motion was seconded by Dr. Murphy and carried . . .

Election of Councilors

Speaker Gundersen: We will now proceed with the election of councilors. According to precedent, the councilors are elected by the House as a whole but nominations are made by the districts. The Secretary will read the roll of counties in each district and the delegates from each district affected will have five minutes in which to caucus.

Secretary Crownhart: In accordance with custom, there may be nominations from the floor and there may be more than one nomination from the caucus. We have five councilors to elect. In the Seventh District, as your Speaker informed you, it is the express wish of the Councilor, Dr. Beebe, not to be re-elected.

The societies in the Seventh District are Juneau, La Crosse, Monroe, Trempeleau-Jackson-Buffalo and Vernon County Societies. When the Speaker declares a recess, will the delegates from the Seventh District meet for their caucus in the corner of the room designated.

The Eighth District will elect a councilor to succeed Dr. Duer whose term expires. The counties which comprise the district are: Marinette-Florence, Oconto and Shawano County Societies.

The Ninth District will elect a councilor to succeed Dr. Joseph F. Smith of Wausau whose term expires. The counties in the district are Clark, Green Lake-Waushara-Adams, Lincoln, Marathon, Portage, Waupaca and Wood County Societies.

The Tenth District will elect a councilor to succeed Dr. H. M. Stang of Eau Claire, whose term expires. The counties in the district are Barron-Washburn-Sawyer-Burnett, Chippewa, Eau Claire-Dunn-Pepin, Rusk, Polk and Pierce-St. Croix County Societies.

The Thirteenth District will elect a councilor to succeed Dr. I. E. Schiek of Rhinelander. The counties which comprise the district are Forest, Price-Taylor, Langlade and Oneida-Vilas County Societies.

. . . The places of meeting were designated and a five-minute recess declared . . .

Speaker Gundersen: The House will be in order. I have been informed that Dr. E. F. Schneiders of Madison is unable to be here. He was designated as chairman of the committee on Reports of Standing Committees. I shall therefore designate Dr. A. E. Rector of Appleton in his place.

We will now hear the nominations for councilors, and I shall call first upon the Seventh District.

Dr. Anderson (La Crosse): The Seventh District nominates as its Councilor Dr. Henry A. Jegi of Galesville.

Speaker Gundersen: Are there any further nominations? . . . If not, I shall entertain a motion that the nominations be closed and the unanimous ballot be cast for Dr. Jegi.

Dr. Cunningham: I so move.

. . . The motion was seconded by Dr. Peterson and carried . . .

Speaker Gundersen: Nominations are now in order for a Councilor from the Eighth District.

Dr. Redelings (Marinette): The Eighth District takes pleasure in nominating Dr. Guy Duer of Marinette to succeed himself. He has been a very dutiful and faithful Councilor.

Speaker Gundersen: Are there any further nominations?

Dr. Peterson: I move the nominations be closed and that the unanimous ballot be cast for Dr. Duer.

. . . The motion was seconded by Dr. Sisk of Madison and carried . . .

Speaker Gundersen: Nominations are in order for a Councilor from the Ninth District.

Dr. Pomainville (Wisconsin Rapids): The Ninth District nominates Dr. Joseph Smith to succeed himself.

Speaker Gundersen: Are there any further nominations? If not, all in favor of designating Dr. Smith as Councilor from the Ninth District will say "Aye"; contrary "No". Dr. Smith is elected Councilor of the Ninth District.

Nominations are now in order for a councilor from the Tenth District.

Dr. A. S. White (Rice Lake): The Tenth District nominates Dr. F. E. Butler of Menomonie.

Speaker Gundersen: Are there any further nominations? . . . If not, I shall entertain a motion that the nominations be closed and that the House cast its vote for Dr. F. E. Butler of Menomonie.

Dr. Cunningham: I so move.

. . . The motion was seconded by Dr. Rector of Appleton and carried . . .

Speaker Gundersen: Nominations are in order for a Councilor from the Thirteenth District.

Dr. W. S. Bump (Rhinelander): The Thirteenth District places in nomination for Councilor the name of Dr. Joseph Lambert of Antigo.

Speaker Gundersen: Are there any further nominations? . . . If not, I shall entertain a motion that the nominations be closed and the House cast its vote for Dr. Lambert as Councilor of the Thirteenth District.

Dr. Bump: I so move.

. . . The motion was seconded by several and carried . . .

Secretary Crownhart: At this time, may the Secretary make an announcement? He has had a telegram from Dr. W. E. Bannen, a delegate from our Society to the American Medical Association, expressing his hope for a good meeting and expressing his regret in not being able to meet with us due to illness and death in his family.

Speaker Gundersen: Under the Constitution, the committee appointments of the President-Elect should be confirmed by the House.

Your Speaker has the pleasure of presenting your President-Elect and we shall be pleased to hear from him both as to his committee appointments and recommendations for the future conduct of the Society. Dr. Ralph M. Carter of Green Bay.

The President-Elect

President-Elect Carter: Mr. Speaker and Members of the House of Delegates: As your incoming President, when I contemplate the year of work and responsibility which lies ahead of me, I become very humble in spirit. The office of President is the highest honor which the State Society has in its power to bestow, but this office carries with it a corresponding weight of obligation.

Let me assure you that I appreciate the honor and will endeavor to show my appreciation during the coming year by doing everything within my power to advance the interests of the medical profession of the state. I shall need and will do my best to deserve the continued help and cooperation of every member. Suggestions and comment will be welcome at any time and will be given careful consideration.

It is customary at this time for the incoming President to submit to the House of Delegates any recommendations which he may have regarding the policies of the Society. I have only a few things to bring to your attention and they are more in the nature of suggestions than actual recommendations.

The older I grow in the practice of medicine and the broader by experience becomes in the various problems which presently confront the medical profession, the more I am convinced of the value of medical organization to each individual practitioner.

The state organization can only be strong when it is composed of strong local units,—the county societies. The strength of a local society does not consist merely in the number of its paid-up members. For his own good, every eligible practitioner should belong to his local unit, but his duty is not discharged by merely joining and paying his dues.

While the scientific side of county medical society meetings is important and should by no means be lost sight of, nevertheless, under present-day conditions, if the private practice of medicine is to survive, certain other activities of almost equal significance must be undertaken.

The county medical society is the point of contact between organized medicine and the public at large. It should be the advisor and coordinator of all medical and public health problems and activities of the community in which it is situated. It should be the place to which the local public can turn, as to a friend, for help, guidance and specialized knowledge.

To enable any county society to attain this position depends entirely upon the united efforts of the individual practitioners composing its membership. Petty differences and jealousies among the members must be forgotten for the common good; the officers and committees should be chosen with care, and for their ability and fitness for their tasks; in short, the medical profession must sell itself to the American people and prove that it can deliver better service than any system of state medicine yet devised. All this can be done through the county

society. I earnestly commend this thought to your serious consideration.

Recently, at a meeting of the Fifth District Medical Society held in Sheboygan, Dr. G. E. Seaman, superintendent of the Winnebago State Hospital, in the course of an address, made a statement to the effect that the State Medical Society could well devote some time to the problem of the mentally ill in the state and county institutions. His point seemed to me to be well taken, and I accordingly wrote to him for an elaboration of his views. I quote in part his reply.

"I am sure that the State Medical Society can do much to promote the efficiency of the institutions and the welfare of patients in both the state and the county hospitals. I use the term hospitals because these institutions should be hospitals in fact, since the objective of both the state and county institutions is the care of the mentally sick, their cure where possible, their rehabilitation and restoration to usefulness.

"The county asylum system of Wisconsin has proven itself. Originally these institutions were looked upon for the most part as custodial institutions, and they came to be known as chronic asylums or asylums for chronic insane. The time has long passed when this designation should have been dropped. Experience has shown that many cases transferred from state institutions to the county make an adjustment there and are able to return to their homes and become useful.

"The care of the mentally ill, whether in state institutions, county institutions, private institutions, or in home surroundings, is primarily a medical question. Nervous and mental diseases constitute a very considerable proportion of all the problems which call for medical service and advice. It is therefore a legitimate and proper interest of the medical profession. The State Board of Control and the management of both state and county institutions, I am sure, will welcome any interest which the organized profession manifests in this direction."

After some further discussion of various aspects of the problem, which time will not now permit me to go into, he continues:

"In my opinion, the State Society should have a special committee to interest themselves in the state hospitals for the sick, including the state hospitals and county hospitals and asylums. This committee should study the problem, should feel free to make any suggestions to the State Board of Control and to the medical staff and managements of the institutions which the organized profession considers to be in the interests of the patients."

As I have said, Dr. Seaman's point appears to me to be well taken and I feel that the State Society could very properly make this one of its activities. However, my knowledge of this field is very limited, and there may be certain angles, political and otherwise, which are not apparent to first glance and which would require serious consideration before anything is undertaken and which, furthermore, might make it inadvisable for any action to be taken at this time.

Another subject to which I should like to direct your attention for a moment is Workmen's Compensation. As we all know, when the compensation laws of this and most other states were framed and passed, the medical profession, although vitally affected, had practically no voice whatever in the matter.

This was due, undoubtedly, in large measure to the indifference of the profession and to lack of knowledge on its part as to what it was all about. Be that as it may, compensation laws are here to stay. Changes are constantly being proposed and made which tend to broaden the scope of these laws and almost daily questions arise which are of the utmost concern to the medical profession.

Would it not be in order for the House of Delegates to consider the advisability of setting up a special committee on Workmen's Compensation to keep in close touch with all developments in this field which concern the general medical profession of the state? Of course, we already have a legislative committee but they have their hands full with their present activities, without taking on anything more, and I feel that a committee such as I am here proposing could render a real service.

One final expression of opinion and I shall proceed to my committee appointments. I sincerely feel that our dues should be restored to fifteen dollars a year. I shall not attempt to argue the question at this time, as my remarks will be apparent when the budget is submitted to you for your consideration.

Suffice it to say that even though the proposed budget may be susceptible of some trimming in certain items, nevertheless we are still running pretty close to the ragged edge. While it is true that we have had a general fund of $25,000 upon which we could draw if it becomes absolutely necessary, I have felt that this fund should be kept intact, if possible. We shall have to draw upon this fund this year to the extent of $5,000. If it appears that dues of fifteen dollars a year will work too great a hardship upon our membership, would it not be possible to work out some plan by which dues could be paid in semi-annual or even quarterly payments, if necessary.

I come now to my committee appointments.

Committee on Scientific Work

Dr. Gunnar Gundersen of La Crosse to succeed Dr. Wenzel Wochos of Kewaunee.

In connection with this appointment, I desire to make a brief statement. Dr. Wenzel Wochos has served three years on this committee. He has been a good man and a hard worker. Under these circumstances, I felt that he had earned the chairmanship if he wanted it. I accordingly asked him about it, but felt that someone from a larger city, whose acquaintanceship with the membership was more extensive than his, would be more suitable.

Committee on Public Policy

Dr. S. E. Gavin of Fond du Lac to succeed himself.

I feel that a continuing membership on this committee is extremely desirable. There are certain hold-over problems which can be better handled if the entire committee is familiar with them. For this reason, I have reappointed Dr. Gavin.

Editorial Board

Dr. Stanley Seeger of Milwaukee to succeed Dr. G. H. Ewell of Madison.

Committee on Medical Defense

Dr. E. G. Ovitz of Laona is reappointed.

Committee on Medical Education and Hospitals

Dr. W. S. Middleton of Madison to succeed the late Dr. C. R. Bardeen.

Committee on Medical Economics

Dr. A. E. Rector of Appleton to succeed Dr. W. G. Riopelle of Beaver Dam, deceased.

Committee on Health and Public Instruction

Dr. Wenzel Wochos of Kewaunee to succeed Dr. W. G. Sexton of Marshfield.

Committee on Coordination of Medical Services

Dr. Joseph Smith of Wausau is reappointed.

The Career Committee

Dr. D. L. Dawson, Rice Lake, representing the 10th District.

Dr. R. L. MacCornack, Whitehall, representing the 7th District.

Dr. Cyril G. Richards, Kenosha, representing the 2nd District.

Dr. Gideon Benson, Richland Center, representing the 4th District.

Dr. George Moore, Antigo, representing the 13th District.

Your President desires to continue the three special committees on (1) Child Health and Protection (2) Medical Care of Veterans and (3) Medical History. With the approval of the House, I should like to appoint the following to the

Committee on Child Health and Protection

Dr. Carl Henry Davis, Milwaukee, Chairman.
Dr. A. B. Schwartz, Milwaukee.
Dr. H. A. Sincock, Superior.
Dr. R. L. Cowles, Green Bay.
Dr. Carl Harper, Madison.
Dr. W. T. Clark, Janesville.

Committee on Medical Care of Veterans

Dr. C. A. Dawson, River Falls.
Dr. Otho Fiedler, Sheboygan.
Dr. E. C. Cary, Reedsville.

Committee on Medical History

Dr. F. Gregory Connell, Oshkosh, with power to appoint his own associates.

Speaker Gundersen: Since Dr. Carter has appointed your Speaker to one of the committees, I shall ask Dr. Sargent to preside.

. . . Vice-Speaker Sargent in the chair . .

Chairman Sargent: You have heard the appointments of your President-Elect. The Chair will entertain a motion for confirmation of the appointments by the House of Delegates.

Dr. Powers (Milwaukee): I move the appointments be confirmed by the House of Delegates.

. . . The motion was seconded by Dr. McMahon of Glenwood City and carried . . .

Resolutions—New Business

Speaker Gundersen: The House will now proceed to new business. The House is ready to receive any proposed amendments to the Constitution and By-Laws and any resolutions. I shall ask the delegate presenting a resolution to come forward and read it. It will then be referred to the Reference Committee on Resolutions, which committee will present its report tomorrow evening and at that time general discussion may be had.

Practice of Radiology and Pathology

Dr. Murphy (Milwaukee): I have been requested to present the following resolution in behalf of the Directors of the Milwaukee Medical Society.

"WHEREAS, The practice of radiology is the practice of medicine and is no more part of the corporate activities of a hospital than any other branch of medical practice; and

"WHEREAS, Radiologists are subject to the same Code of Ethics as other members of the American Medical Association and should be bound to the same Code of Ethics in their relations with radiologists; and

"WHEREAS, The hospital has a right to adequate and fair return for absolescence on x-ray equipment, rental for space occupied and charges for heat, telephone, and so forth, but not to any part of the net return from professional service of the radiologist; and

"WHEREAS, The House of Delegates of the American Medical Association meeting June 10, 1935, in Atlantic City, in recognition of present unsatisfactory method of compensating radiologists for their services in hospitals, adopted a resolution to the effect that while the radiologist's remuneration may, without violating the principles of medical ethics, be in the form of salary, fees, or commission, in no case shall any economic arrangement be operative which is designed to direct a profit to the institution from private patients; and

"WHEREAS, The hospital radiologist's economic relation in Milwaukee is in many instances a gross violation of the above stated principles; be it

"*Resolved*, That the Secretary of the Milwaukee Roentgenological Society respectfully petition the Board of Directors of the Milwaukee County Medical Society to take such action as may be necessary to terminate the unfair practices herein complained of; and be it further

"*Resolved*, That a copy of these resolutions be sent to the County Medical Society and to each hospital in the city of Milwaukee and to the staffs thereof, to the Wisconsin Medical Journal and to

the bulletin of the Milwaukee County Medical Society, 'The Milwaukee Medical Times.' "

A further resolution:

"WHEREAS, The American Society of Clinical Pathologists at their annual meeting in New Orleans adopted the following recommendations of the Public Relations Committee:

" 'The present situation as regards standardization of hospitals needs stimulation for betterment. The tendency of lay hospitals to commercialize their labor by entering into competition with private labor for outside work is wrong in principle, although it is realized that in communities where private labor is not available the hospital labor must be utilized. Yet it should be a cardinal principle that hospital labor should not enter into such competition with private labor for by so doing they are invading the domain of medical practice.

" 'The clinical pathologist in charge of a hospital is usually on salary and does not share in fees thus collected and this amounts to commercializing him at the expense of his fellow pathologist. This competition is most unfair to both the hospital pathologist and private labor, especially when outside work is done at special hospital prices. This is a growing evil and some remedy should be found. As an instance, one physician, in the same office building as your chairman, stated he would rather have work done close at home if the hospital labor prices would be met.

" 'Too often the hospital, instead of being a place where the physician takes patients for better care and treatment under his orders, is in active competition with one or more branches of medicine and dictates to the physician instead of being subservient to him.'; and

"WHEREAS, A number of the hospitals in Milwaukee are now practicing out-patient medicine for remuneration in the field of laboratory diagnosis; and

"WHEREAS, This competition is unfair by reason of this fact that these hospitals are endowed institutions, pay no taxes and much of their work is done by underpaid help, all of which enables them and has in fact caused them to reduce fees for this type of work far below the fees which must be charged by the members of the profession who specialize in laboratory diagnosis, and who must pay their rental, taxes, and overhead; and

"WHEREAS, It is inimical to the future welfare of medicine to condone the participation of hospitals in the practice of medicine insofar as it relates to outpatient paid work; therefore be it

"*Resolved*, That the Secretary of the Milwaukee Pathological Society respectfully petition the County Medical Society to take such steps as may be necessary to terminate the unfair practices herein complained of; and be it further

"*Resolved*, That a copy of these resolutions be sent to the Council of the Medical Society of Milwaukee County and that a copy be sent also to each hospital in the city of Milwaukee and to the staffs thereof and to the Wisconsin Medical Journal and to the Milwaukee Medical Times, the official publication of the County Society, for publication therein."

Constitutional Amendment

Dr. Bowen (Watertown): I have the following amendment to make to the Constitution of the State Medical Society of Wisconsin:

Article IX, Sec. 2. Repeal all of Section 2 as now constituted.

Section 2 to read:

"Sec. 2. The President, President-Elect, Speaker and Vice-Speaker shall be elected by the House of Delegates. The Secretary and Treasurer shall be elected by the Council. Councilors shall be elected at a meeting of their respective district societies. Notices of election shall be incorporated in a mailed notice to the members at least seven days before such meetings.

"Election, where more than one nomination is received, shall be by ballot and a majority of votes cast shall be necessary to elect. Each candidate for councilor must be a resident of the district which it is proposed to represent and no person known to have solicited votes for or sought the office of councilor shall be eligible for the current election. Other procedure essential to the election shall be governed by Robert's Rules of Order.

"The officers, except the councilors, shall be elected annually. The terms of councilors shall be for three years and all officers shall serve until their successors are elected and installed. Terms of councilors shall expire in the following order:

"Third, fourth, fifth and sixth districts in 1937, seventh, eighth, ninth, tenth, and thirteenth districts in 1938, first, second, eleventh and twelfth districts in 1939, and thereafter shall be elected in order."

This amendment offered in 1935 is to be acted upon in 1936 and shall, upon adoption, be effective on January 1, 1937.

Speaker Gundersen: Any proposed amendment to the Constitution must lie over for one year.

Secretary Crownhart: Inasmuch as we had an earlier amendment tonight amending the same section, I take it that it will be agreeable to the House if the Secretary takes this amendment and then rewords it in accordance with the other amendment so in the event the other amendment is adopted action may be had next year either way. (consent)

High School Athletics

Dr. Rector (Appleton): I desire to present the following resolution:

"WHEREAS, In the past and at the present time the injured public school athlete has been given medical care by the medical profession gratis or at greatly reduced fees; and

"WHEREAS, The medical profession is a group of society all of which are taxpayers; and

"WHEREAS, The public schools are a public institution supported by the taxpayers, the schools should be charged and pay regular fees to the medical

profession for service rendered injured athletes in the same manner in which they pay for the service from any other group of society such as plumbers, carpenters, janitors and teachers; and

"WHEREAS, There is no provision in the present school financial budget for such medical service and is now being paid for in a very unsatisfactory manner by the school athletic departments; now therefore be it

"*Resolved*, That the Outagamie County Medical Society present this resolution to the House of Delegates of the State Medical Society of Wisconsin earnestly requesting that the State Medical Society of Wisconsin confer with the State Department of Education in order to present this problem and request its cooperation in elimination of this unfair practice."

Principles of Ethics

Dr. Sisk: I desire to present the following resolution; which is presented by request:

"WHEREAS, The American Medical Association in 1934, in Cleveland, amended the principles of medical ethics by adding thereto certain provisions, to-wit: (Refer to the Wisconsin Medical Journal, that quotation of the amendment to the Code of Ethics as stated by the Cleveland Assembly of the House of Delegates of the American Medical Association. Paragraph 1.

1. Lay organizations. "It is unprofessional for a physician to dispose of his professional attainments or services to any lay body, organization, group or individual, by whatever name called, or however organized, under terms or conditions which permit a direct profit from the fees, salary, or compensation received to accrue to the lay body or individual employing him. Such a procedure is beneath the dignity of professional practice, is unfair competition with the profession at large, is harmful alike to the profession of medicine and the welfare of the people, and is against sound public policy."

2. Practice by Clinics. WHEREAS, The growth of groups and clinics has intensified the economic competition between them and individual practitioners, and

WHEREAS, The common custom of employment of "business managers" by the clinics and groups has had a tendency to submerge the ethical principles governing competition among doctors, and

WHEREAS, Clinics and groups were little known, were not serious competition and were not mentioned when the Principles of Ethics were formulated in 1912; therefore be it resolved that a section be added to read:

"The ethical principles actuating and governing a group or clinic are exactly the same as those applicable to individuals. As a group or clinic is composed of individual doctors each of whom, whether employer, employee or partner is subject to the principles of ethics herein elaborated, the uniting into a business or professional organization does not relieve them either individually or as a group from the obligation they assume when entering the profession."

3. Contract Practice. "By the term 'contract practice' as applied to medicine is meant the carrying out of an agreement between a physician or group of physicians, as principals or agents, and a corporation, organization or individual, to furnish partial or full medical services to a group or class of individuals for a definite sum or fixed rate per capita.

"Contract practice per se is not unethical. However, certain features or conditions if present make a contract unethical, among which are: (1) When there is solicitation of patients, directly or indirectly. (2) When there is underbidding to secure the contract. (3) When the compensation is inadequate to assure good medical service. (4) When there is interference with reasonable competition in a community. (5) When free choice of physician is prevented. (6) When the conditions of employment make it impossible to render adequate service to the patients. (7) When the contract, because of any of its provisions or practical results, is contrary to sound public policy.

"Each contract should be considered on its own merits and in the light of surrounding conditions. Judgment should not be obscured by immediate, temporary or local results. The decision as to its ethical or unethical nature must be based on the ultimate effect for good or ill on the people as a whole."

The following is the body of the resolution.

"WHEREAS, It appears that the machinery for enforcing these amendments to the principles of medical ethics is inadequate; now therefore be it

"*Resolved*, By the House of Delegates of the State Medical Society of Wisconsin assembled in the city of Milwaukee, the 17th of September, 1935, that the President of the State Medical Society shall appoint three members of the Society as a committee to stimulate local investigation of alleged violations of medical ethics and to act as an advisory committee to local investigating committees; and be it further

"*Resolved*, That county medical societies be required to appoint and maintain investigating committees to investigate into alleged violations of medical ethics in their respective counties, to keep records of such investigations, to make reports and recommendations to their local medical societies and to file a copy of said reports and proceedings in the office of the State Medical Society; be it further

"*Resolved*, That such investigations be made in such manner and form as may be recommended by the advisory committee appointed by the President of the State Medical Society."

Foreign Graduates

Dr. Hipke: Last year this house passed on the following resolution, which I desire to re-submit at this time:

"It is recommended by this House of Delegates to the Committee on Public Policy that legislation be introduced in the coming legislature requiring that only physicians who have taken the full course in a recognized medical school in the United States be licensed to practice medicine in Wisconsin." This was not brought up before the legislature and the matter was referred to in the last supplementary report of our Secretary. So in consideration of this last report I offer the following resolution:

"WHEREAS, It is the purpose of organized medicine to maintain the highest educational standards looking towards the development of more capable practitioners:

"WHEREAS, In recent years, there have been a number of students who, not being able to matriculate into medical schools of this country, have obtained medical education abroad;

"WHEREAS, These students, upon completion of their education, have returned to this country to compete with physicians educated here;

"WHEREAS, In most foreign countries a physician must have received his medical education in the country in which he practices; be it

"*Resolved*, That it is recommended by this House of Delegates that the State Board of Medical Examiners be requested to adopt a rule requiring that only physicians who have a full course in a recognized medical college in the United States or of a country that accepts a diploma from a recognized medical school of the United States on an equal basis with their own be licensed to practice medicine in the state of Wisconsin."

Medical Practice Act and Accidents

Dr. Fidler (Milwaukee): I have two brief resolutions to present.

"WHEREAS, The State Board of Health is to be highly commended for work done by its investigator in eliminating violators of the Medical Practice Act; and

"WHEREAS, The need for the continuance of this work is imperative; and

"WHEREAS, The present appropriation is inadequate; be it

"*Resolved*, That the Council of the State Medical Society instruct its Committee on Public Policy to introduce legislation in the next session of the state legislature which will provide at least $7,000.00 per annum for this valuable work."

* * * *

"WHEREAS, The number of accidents has sharply increased in recent years, resulting in greater demands being made upon physicians and hospitals; and

"WHEREAS, A large percentage of those injured are unable to pay for their medical and hospital services but are paid for damages by the person responsible for the accident or by an insurance company; and

"WHEREAS, A bill, introduced by the State Medical Society of Wisconsin during the recent session of the legislature, proposing legislation which would protect physicians and hospitals to the extent that medical and hospital bills would automatically become a lien against moneys due the injured which might be paid to him for damage incurred, either by the person responsible for the accident or by an insurance company, failed to become a law; and

"WHEREAS, It is not reasonably possible for physicians and hospitals to continue to assume the burden of caring for injured persons without some assurance that they will be compensated for their services; therefore be it

"*Resolved*, That this House of Delegates recommends to the Committee on Public Policy of the State Medical Society of Wisconsin that a bill proposing legislation which would protect physicians and hospitals against the loss of moneys due them for services rendered in accident cases be introduced again in the next session of the legislature; further, that because of its importance this legislation be given primary consideration by the committee in laying its future plans."

Speaker Gundersen: Are there any further resolutions? If not, these resolutions will be referred to the Reference Committee on Resolutions, which will report tomorrow evening and at which time these resolutions will be open for discussion.

Do you wish to discuss at this time whether the bureau to weed out quackery should operate under the State Board of Health or the State Board of Examiners? If so, I shall ask the Secretary to state the background.

Investigator for Board of Health

Secretary Crownhart: At the current session of the legislature there was caused to be introduced late in the session, as was reported to you by legislative bulletins, a bill which proposed to change the supervision of present investigator to weed out quackery, from the supervision of the State Board of Health to the supervision of the State Board of Medical Examiners.

Because the Society, through this House of Delegates, had voted, some four years ago, that the duties should rest in the State Board of Health, at which time it was so introduced in the legislature and adopted, your Committee on Public Policy felt it had to oppose the current measure.

Because the measure originated within the State Board of Medical Examiners, your Secretary assured the Board that any member who wished to discuss that subject, having in mind future legislation, might do so at this session or a subsequent session of the House, in order that they might present to you their views on the subject, and if you saw fit to reverse your former policy, that would meet with the approval of the Committee on Public Policy.

The question is whether you wish to give members of the Board of Medical Examiners the opportunity to discuss their position with you briefly at this time. Is there objection, Mr. Speaker?

Dr. Rector (Appleton): I move the Board be given such opportunity.

. . . The motion was seconded by Dr. Hipke of Milwaukee and carried . . .

Secretary Crownhart: I shall ask the Board members to correct me if I am wrong. The entire medical profession of the state some years ago, eight, as I recall, felt that conditions were becoming impossible insofar as those unable to secure a license were openly and flagrantly violating the laws of the state by opening offices and in fact practicing.

The Board, at the time, had some little surplus in its funds and employed under general permissive powers of the statutes, an investigator. On the basis of the work he did, we went to the legislature and asked for an appropriation from the general fund in the amount of five thousand dollars a year to employ an investigator. That measure passed and was vetoed by Governor Zimmerman. It was re-introduced in the legislature at your request the following session, was passed, and signed. The Board employed such an investigator and he continued to do exceedingly successful work.

Then it became apparent, as legislative sessions progressed, we were having very real difficulty from two sources. The question was constantly raised in the legislature that if this work was to be done for physicians, and that was the attitude they took, inasmuch as the appropriation was to the Board, it should be supported by an annual registration fee. To this your Society very positively objected.

Second, the investigator himself, as his work progressed, repeatedly found in court trials that the attorney for the defendant referred to the investigator as being a persecutor inasmuch as he was representing the "medical board".

This House accordingly instructed its Committee on Public Policy, some four years, in adopting the report of the committee, to transfer the duties and appropriations, if they could obtain such transfer, to the State Board of Health. That transfer was obtained.

Since that time, to the knowledge of your Secretary, it has practically eliminated the "persecution" defense that up to that time was rather successful in many cases.

The House acted upon the further statement of the Committee on Public Policy that laws governing who may treat the sick were in fact health laws. The question now is to whether this appropriation should be transferred back. It is perfectly true in the last few years the investigator has been greatly hampered by reason of the fact that the state has entered upon an economy budget. It was a necessity. They only had that much money. The Governor at the time, in speaking to representatives of your Society said, "Gentlemen, we are faced with facts and not theories. We ask you, in good faith, in this emergency situation we face to accept gracefully a cut in this appropriation of exactly fifty per cent. While this will hamper greatly the work of your investigator, it will continue him and while it will give him only two dollars a day for travel expense, at least the work will not be discontinued. Presumably, when the state is in better financial condition, the appropriation, along with other appropriations that have been reduced, will be increased."

That has hampered the investigation, but the Committee on Public Policy considered the Governor's statement was proper and believed that we should cooperate. The work of the investigator has been hampered. He has not the money with which to travel. The State Board of Health found some additional funds, and he has been able to carry on to a better extent now than a year ago.

The State Board of Health assures us when social security funds become available upon convening of the next Congress or before, additional travel funds will be available so the people of the state may be far better protected against those who would prey upon them through open fraud, deceit, and quackery.

The question before the House is whether we shall take the appropriation and the investigator and recommend to the legislature they be transferred back to the State Board of Examiners. That is strictly a question for this House. The Secretary has no opinion to express. There are members of the State Board of Medical Examiners here this evening. I presume you will call upon them now.

Speaker Gundersen: Does any member of the Board of Medical Examiners wish to speak on this subject?

Dr. Gramling: As a member of the Board, I believe I may say in many ways the Board felt if it had the power to license it should have power to punish and revoke, to punish those who violate the medical practice act.

The difficulty, as I see it, is that as the Board of Medical Examiners is now constituted it would be a greater financial outlay to direct this campaign aganist quackery from the State Board of Medical Examiners than it would under the State Board of Health. It is a matter for the delegates here to decide which they desire. I am just expressing my personal opinion in the matter.

The resolution that the Milwaukee County Medical Society presented on increasing the pay of the investigator, I think, is very important, because I think there is considerable violation of the medical practice act in the state of Wisconsin. There are other members of the Board here who can speak for themselves.

Secretary Crownhart: All members of the Board's legislative committee were invited to be present. The Secretary, Dr. Flynn, is present.

Dr. Flynn: The State Board of Medical Examiners has not had a meeting since their last June examination. Therefore, we have no report to make to this House of Delegates this evening as a body. However, we have an opinion dissenting from that which your Secretary just stated. That opinion we will be glad to express to the House of Delegates at the coming meeting of the House of Delegates one year from today. The legislature does not meet for two years and we have ample time in that period to

give you a full discussion as to the other side of the question.

I shall not be here tomorrow and will not be able to appear before the Resolutions Committee. If I may be permitted, I would like to comment upon a resolution which was introduced regarding foreign students. I am very much in favor of that resolution. I feel those students who leave our schools and go to a foreign school should be treated somewhat differently than those of our own American institutions. Speaking for myself, I do not think any action you take will meet with any opposition on the part of the State Board of Medical Examiners.

Secretary Crownhart: Is it your suggestion, Dr. Flynn, that the House defer action on this question until its next meeting in 1936?

Dr. Flynn: Yes, because we have not had an opportunity to discuss it among ourselves. There are only four members here. We were of the opinion you would not take any action until it was discussed before the body. We will be pleased to discuss it with you at your meeting a year from now.

Secretary Crownhart: Mr. Speaker, I suggest the matter be laid on the table to be brought before the 1936 House of Delegates.

Speaker Gundersen: Do I hear a motion this matter be laid on the table until next year?

Dr. Henske (Chippewa Falls): I so move.

. . . The motion was seconded by Dr. Giesen of Superior and carried . . .

Speaker Gundersen: Is there any further business to come before this session of the House?

Secretary Crownhart: Do you wish to have any further discussion on the report presented to you tonight in executive session?

Speaker Gundersen: If it is your desire to have discussion on this subject at this time, we will need to go into executive session.

Dr. McMahon: If I am not out of order, I move that discussion be deferred until the next session of the House of Delegates so that the delegates may have sufficient time to study the matter contained in the report; the report to be referred in the meantime to the proper reference committee and discussed at the time the committee reports.

. . . The motion was seconded by Dr. Sisk and carried . . .

Secretary Crownhart: Under the Constitution and By-Laws the House itself determines at what time and place subsequent sessions shall be held. As a matter of fact, the Secretary tries to arrange this date in advance, so that the time for meeting may not be in conflict with the general session. We have a scientific meeting tomorrow night at eight-thirty with a smoker following. Your Secretary has assumed that you would like to hear the program later in the evening and that accordingly you would like to meet here at six-thirty.

Speaker Gundersen: Is there any objection to the suggestion of the Secretary? If not, we will hold our next session tomorrow evening at six-thirty.

Dr. Peterson: I move we adjourn to meet again tomorrow night at six-thirty.

. . . The motion was seconded by Dr. Marsh and carried . . .

. . . The meeting adjourned at ten-twenty p. m. . . .

Adjournment

WEDNESDAY EVENING SESSION

September 18, 1935

The second session of the House of Delegates was called to order at six-thirty p. m. by the Speaker, Dr. Gundersen.

Speaker Gundersen: You will please be in order. We will first hear the report of the Committee on Credentials.

Dr. Christofferson: There are twenty-six delegates registered at this time. I move that the attendance as compiled by the slips be the roll of this House.

. . . The motion was seconded by Dr. Toepfer of West Allis and carried . . .

Speaker Gundersen: The next order of business is the report of the Reference Committees. The first is the report of the Reference Committee on Reports of Officers, Dr. Murphy of Milwaukee, Chairman.

Dr. Murphy: Mr. Speaker and Members of the House of Delegates:

Your Committee on Reports of Officers has had under consideration the 1935 annual reports of the District Councilors, the Treasurer, the Secretary and Managing Editor, together with certain recommendations of the President and Secretary, and, after a thorough and careful study, have given them our unanimous approval and these officers our sincere commendation for the faithful manner in which they have performed their duties. We do hereby recommend to the House of Delegates that those reports be accepted.

On behalf of the committee, I move the adoption of this portion of the report.

. . . The motion was seconded by Dr. Peterson of Sun Prairie . . .

Secretary Crownhart: That portion of the report means you are accepting the reports of the Chairman of the Council, the Secretary-Managing Editor, and the Treasurer.

. . . The motion was carried . . .

Public Hospitals

Dr. Murphy: We further request that the following suggestions be considered in regular order by the House of Delegates:

1. The Councilors of our Society directed our Secretary officially to call attention to a situation which they consider inimical to public health and policy, namely, there are no restrictions nor special qualifications at present as to those who may open and operate a public hospital in this state, nor what should be the necessary and minimum equipment required, and also the necessary standards covering

building sanitation and fire hazard elimination to be set up.

Therefore, it is requested that the President be empowered to create a committee of three composed of one member each of the State Board of Health, the State Medical Society and the Wisconsin Hospital Association to make a survey and report their suggestions for needed legislation to the Secretary of our State Medical Society.

And to conform with parliamentary procedure we submit the same as a motion, striking out the first four words and substituting "Be it resolved".

. . . The motion was seconded by Dr. Hipke of Milwaukee and carried . . .

Dr. Murphy: 2. We commend our Secretary for his activity and gracious efforts to secure from the Federal Public Works Administration a ruling whereby the families of the so-called P.W.A. workers, most of whom will be on a mere subsistence wage, may have medical relief extended to their families.

3. We also compliment and thank him for the fine tribute he paid to our Woman's Auxiliary for the great assistance they have been in helping us to carry out our program.

Section on E–E–N–T

4. It is recommended that the House of Delegates authorize a section of the Society on Eye, Ear, Nose and Throat, similar to the section on Radiology.

And to conform with parliamentary procedure, it is requested that the first three words be stricken and substitute therefore "Be it resolved" and we now place such motion before the House for its consideration.

. . . The motion was seconded by Dr. Toepfer of West Allis and carried . . .

Dr. Murphy: Our President states that during the past year increased permanent expenses, caused by greatly increased volume of work and unlimited demands on our central office, have been such that receipts do not balance expenditures and that our Society has been obliged to draw heavily on our reserve. This is not desirable.

And, therefore, *Be it resolved*, That the state dues be returned to the former rate of fifteen dollars per year, and, in accordance with the suggestion of our President, a fund of $500.00 per year be appropriated from this amount for the purpose of employing added and necessary legal talent.

Secretary Crownhart: The Committee on Resolutions will have an almost identical resolution and I suggest that portion of the report be combined with the report of the Committee on Resolutions except in so far as the fund of five hundred dollars.

Study of Mental Hygiene

Dr. Murphy: This has been recommended by the President. The committee moves that a fund of five hundred dollars per year be appropriated from this amount for the purpose of employing added and necessary legal talent.

Secretary Crownhart: You are speaking of the field of mental hygiene.

Dr. Murphy: Yes.

. . . The motion was seconded by Dr. White of Rice Lake and carried . . .

Annual Elections

Dr. Murphy: 6. It is suggested by our Secretary that, owing to the holding of elections by component county societies annually in December, collections of dues are frequently delayed; therefore be it

Resolved, That our State Constitution be amended to provide for the holding of the election of such officers in each county society in October of each year.

The committee moves the adoption of this recommendation.

. . . The motion was seconded by Dr. Hoffmann of Hartford and carried . . .

Survey of State Institutions

Dr. Murphy: 7. It is also suggested by our President and your committee concurs as follows:

Be it resolved, That the President be empowered to appoint a special committee of three to continue with personnel intact from date of appointment until the conclusion of the 1937 session of the Wisconsin Legislature for the purpose of making a detailed study and survey of the care of sick, including mentally ill in the state and county hospitals and asylums, and to be authorized to make suggestions to the State Board of Control and the medical staffs and managements of such institutions as the organized profession considers to be in the interests of patients.

Your committee moves the adoption of the above resolution.

Dr. Sisk (Madison): May I ask for a re-statement of that resolution?

. . . Dr. Murphy re-read the resolution . . .

Dr. Sleyster: I would like to ask the committee if this refers especially to Dr. Seaman's letter as read by the President-Elect. If it does, I would like to state the State Society has at present a psychiatric committee charged with the same duty and comprising a trained personnel. I think it would be better to refer the matter to the Psychiatric Committee of the State Society.

Secretary Crownhart: That is a committee of the Council. This would be creating a committee of the Society.

Dr. Murphy: According to this motion the committee appointed by the President would have more to do than just the psychiatric cases. It would include the medical institutions of the state in general, including the mentally ill in county and state hospitals. In our minds, it would be a committee of rather broad scope, and, of course, it is only to make suggestions for the present.

Dr. Sisk: Would that conflict with other committees?

Secretary Crownhart: Not necessarily.

Dr. Sleyster: It would be taking the work away from the Psychiatric Committee.

Dr. Lettenberger (Milwaukee): May I ask who is on that committee?

Dr. Sleyster: Dr. Rosenberger is chairman, Dr. Garvey, Dr. Powers, Dr. Jefferson, and myself. There are five members.

Dr. Lettenberger: It seems to me it is pretty much made up of Milwaukee members.

Dr. Sleyster: It is quite difficult to get a committee throughout the state and get them together. They could create a new committee. Dr. Seaman's letter referred to such specialized work and I wondered if that were the principal object. If it were, it could be assigned to that committee. If it were to be a broad committee, that is different. In listening to the reading of Dr. Seaman's letter, I thought it applied only to the state institutions for the insane.

President-Elect Carter: Mr. Speaker, in presenting this question last night, I probably did not give enough of Dr. Seaman's letter. I did not want to make my remarks too long.

Dr. Seaman particularly has reference to the proposition in the smaller towns. I think there are only four towns in the state where a person is picked up on the street, suspected of some form of insanity and is put into the county jail. Maybe he stays there two or three days before the judge and the commission examine him. Dr. Seaman would particularly like to see that avoided. He would like to see a set-up in each county whereby a person suspected of insanity could be sent to a regularly recognized institution for the care of the sick and be given proper care until such time as his condition could be passed upon.

Furthermore, he feels in many of the county asylums there are not only mentally sick people but cases of appendicitis and other conditions which may come up. He feels that each county asylum should have some provision for taking care of these people. He feels that the doctors in a given locality should take more interest in the insane patients than they have done up to the present time.

The purpose of my remarks last night was to appoint a committee to investigate all of these questions and see if it were proper for the State Society to take action or to recommend action in each county. I make these remarks to amplify a little of what I said last night. I did not read all of Dr. Seaman's letter because it was too long.

Speaker Gundersen: Are you ready for the question? Is there any more discussion? All in favor of the motion made by Dr. Murphy say "Aye"; contrary "No". The motion is carried.

Committee on Compensation Act

Dr. Murphy: 8. Our President suggests the advisability of setting up a special committee on Workmen's Compensation to keep in close touch with all developments in this field which concern the general medical profession of the state.

Your Committee therefore moves adoption of the following resolution:

Be it resolved, That the House of Delegates empower the President of our Society to appoint a permanent committee of three to be known as a Committee on Workmen's Compensation, whose duty it shall be to make a study of developments in this field and report the results of such at the annual meeting.

Your committee moves the adoption of this resolution.

. . . The motion was seconded by Dr. Peterson of Sun Prairie and carried . . .

Dr. Murphy: Your Committee respectfully submits this report and recommendations for the approval of the House of Delegates at this time.

COMMITTEE ON REPORTS OF OFFICERS,
Francis D. Murphy, Milwaukee, *Chairman*,
C. W. Henney, Portage,
T. J. Redelings, Marinette.

The Committee moves the adoption of the complete report with the exception of that portion which will be considered by the Committee on Resolutions.

. . . The motion was seconded by Dr. Marsh of Madison and carried . . .

Speaker Gundersen: We will next have the report of the Committee on Resolutions, Dr. J. C. Sargent of Milwaukee, Chairman.

Secretary Crownhart: Mr. Speaker, may I interrupt at this time? Anticipating that our meeting tonight may run over the time allotted and recognizing that the Program Committee has set a definite engagement for us at the hour of eight-thirty, may I suggest we have a motion that when we reach that hour the House will then recess until eight o'clock tomorrow morning, at which time we will complete our business and proceed thereafter to the election of officers.

Dr. R. G. Arveson (Frederic): I so move, Mr. Speaker.

. . . The motion was seconded by Dr. Powers of Milwaukee and carried . . .

Speaker Gundersen: We will now hear the report of the Resolutions Committee, as presented by Dr. Sargent.

Dr. Sargent: Report of the Reference Committee on Resolutions: Mr. Speaker and Members of the House of Delegates: The Reference Committee on Resolutions has met, taken counsel with many of the members of the House of Delegates and others of the Society and given consideration to three major things, first, the various resolutions that were referred to it from the Chair of the House last night; second, certain other recommendations that were presented to it by members of the Society, and, third, the question of the dues for the coming year.

National Board

Resolution Number 1, submitted by the Committee on Public Policy:

"WHEREAS, The American Medical Association at its 88th annual session, held at Cleveland, Ohio, June, 1934, adopted the report of the Reference

Committee on Medical Education, which contains the following recommendations:

" 'The conclusion of the Council, expressed in Paragraph 8, that it would be undesirable to abolish examinations by state boards and substitute therefore a diploma, is commended. Your committee would urge all candidates for licensure to take the examinations of the National Board, since its certificate is recognized by the majority of the state licensing boards.' (Journal of the American Medical Association, Volume 102, No. 26, June 30, 1934); and

"WHEREAS, At the present time the certificate of the National Board of Medical Examiners is not recognized by the Wisconsin State Board of Medical Examiners; therefore be it

"*Resolved*, That the House of Delegates of the State Medical Society of Wisconsin in its 94th annual meeting endorses the examinations conducted by the National Board of Medical Examiners; and be it therefore

"*Resolved*, That this Society recommends to the Wisconsin State Board of Medical Examiners that it take appropriate action so that it may obtain the original examination questions and papers from the National Board of Medical Examiners for such diplomates of said Board as apply for licensure in the state of Wisconsin, to the end that the Wisconcon State Board of Medical Examiners may formally adopt such questions of their own and grade the papers in lieu of the regular examination of the Wisconsin State Board."

The Committee unanimously recommends the adoption of this resolution and on behalf of the committee I move its adoption.

. . . The motion was seconded by Dr. Powers and carried . . .

Lien Law

Dr. Sargent: Resolution Number 2, introduced by Dr. Fidler of Milwaukee:

"WHEREAS, The number of accidents has sharply increased in recent years, resulting in greater demands being made upon physicians and hospitals; and

"WHEREAS, A large percentage of those injured are unable to pay for their medical and hospital services but are paid for damages by the person responsible for the accident or by an insurance company; and

"WHEREAS, A bill introduced by the State Medical Society of Wisconsin, during the recent session of the legislature, proposing legislation which would protect physicians and hospitals to the extent that medical and hospitals bills would automatically become a lien against moneys due the injured which might be paid to him for damages incurred, either by the person responsible for the accident or by an insurance company, failed to become a law; and

"WHEREAS, It is not reasonably possible for physicians and hospitals to continue to assume the burden of caring for injured persons without some assurance that they will be compensated for their services; therefore be it

"*Resolved*, That this House of Delegates recommends to the Committee on Public Policy of the State Medical Society of Wisconsin that a bill proposing legislation which would protect physicians and hospitals against the loss of moneys due them for services rendered in accident cases be introduced again in the next session of the legislature; further, that because of its importance, this legislation be given primary consideration by the Committee in laying its future plans."

The Committee recommends the adoption of this resolution and on behalf of the Committee I move its adoption.

. . . The motion was seconded by Dr. Tufts of Milwaukee and carried . . .

Foreign Schools

Dr. Sargent: Resolution Number 3, introduced by Dr. Hipke of Milwaukee.

"WHEREAS, It is the purpose of organized medicine to maintain the highest educational standards looking towards the development of more capable practitioners;

"WHEREAS, In recent years, there has been a number of students who not being able to matriculate into medical schools of this country, have obtained medical education abroad;

"WHEREAS, These students, upon completion of their education, have returned to this country to compete with physicians educated here;

"WHEREAS, The medical profession is seriously overcrowded;

"WHEREAS, In most foreign countries a physician must have received his medical education in the country in which he practices; be it

"*Resolved*, That it is recommended by this House of Delegates that the State Board of Medical Examiners be requested to adopt a rule requiring that only physicians who have a full course in a recognized medical college in the United States, or of a country that accepts a diploma from a recognized medical school of the United States on an equal basis with their own, be licensed to practice medicine in the state of Wisconsin.

"It is also recommended that if the State Board of Medical Examiners does not act favorably on this matter at their next meeting in January, 1936, that legislation be introduced in 1937 covering the above subject."

The committee acquiesces in the sense of this resolution but feels that the time elapsed between this present meeting and the next meeting of the state legislature is such as to make doubtful the wisdom of a definite decision at this time to enter such matter before the 1937 legislature.

The committee proposes the following amendment: That the next to the last line in the last paragraph reading: "Legislation be introduced in 1937 covering the above subject" be deleted and in its stead the following introduced: "this be made a matter of business at the 1936 meeting of the House of Dele-

gates". On behalf of the Resolutions Committee, I move the adoption of the amendment.

. . . The motion was seconded by Dr. Sisk of Madison . . .

Dr. Gramling: I am in favor of this resolution and have been since the original one was introduced, but I do not think it is worded just right in regard to that clause indicating if the State Board of Medical Examiners have not the authority we seek it by legislation. I do not think it is right to put it on the Board of Medical Examiners. We can go only as far as the statutes of Wisconsin will allow us to go, and we are willing to go the limit.

Speaker Gundersen: Is there any further discussion? If not all in favor vote "Aye"; opposed "No". The amendment is carried.

Dr. Sargent: On behalf of the committee, I move the adoption of the resolution as amended.

. . . The motion was seconded by Dr. Toepfer of West Allis and carried . .

School Athletic Injuries

Dr. Sargent: Resolution Number 4, introduced by Dr. Rector on behalf of the Outagamie County Medical Society.

"WHEREAS, In the past and at the present time the injured public school athlete has been given medical care by the medical profession gratis or at greatly reduced fees; and

"WHEREAS, The medical profession is a group of society all of which are taxpayers; and

"WHEREAS, The public schools are public institutions supported by the taxpayers, the schools should be charged and pay regular fees to the medical profession for service rendered injured athletes in the same manner in which they pay for the service from any other group of society such as plumbers, carpenters, janitors, and teachers; and

"WHEREAS, There is no provision in the present school financial budget for such medical service and is now being paid for in a very unsatisfactory manner by the school athletic departments; now therefore be it

"*Resolved*, That the Outagamie County Medical Society present this resolution to the House of Delegates of the State Medical Society of Wisconsin, earnestly requesting that the State Medical Society of Wisconsin confer with the State Department of Education in order to present this problem and request its cooperation in elimination of this unfair practice."

The Committee recommends the adoption of this resolution and on behalf of the Committee I move its adoption.

. . . The motion was seconded by Dr. Mauermann of Monroe . . .

Speaker Gundersen: Is there any discussion?

Dr. Doege (Marshfield): I believe there is an interscholastic society of some sort among high schools. All societies have the privilege of joining it, which is optional. This society provides some measure of insurance whereby accidents to athletes are paid for. I know the high school in Marshfield belongs to this association. We have received fees for the work done. Whether those fees are at the same level in connection with services to other individuals I cannot say at the present time.

Dr. McMahon (Glenwood City): There is the W.I.A.A. I do not know what those initials stand for but it is sort of an insurance or compensation affair protecting high school athletes. They compensate physicians for fractures only, as I understand, but not for other injuries. If we adopt this resolution, we perhaps will get something for other types of injury beside fractures.

Dr. Cunningham: I am quite certain this association referred to is for the high schools of the state and there is an assessment on each member of twenty-five cents which goes toward paying for injuries in the athletic department in their scheduled games. Unless they are in active scheduled agreement, I think they are not covered. I think it covers them only in the regular schedules and not in athletic activities outside those games.

Dr. Toepfer (West Allis): I am quite familiar with this W.I.A.A. and the insurance coverage. Each athlete paid fifty cents this year. It has been twenty-five cents up to this year. It covers any fracture sustained in practice or in games sponsored by the high school. It does not cover other injuries. In application to the W.I.A.A., each parent must sign that they are personally responsible for any injuries sustained by their son in athletics. The schools maintain that entering into athletic contests is not compulsory and, therefore, the school system of the state is not responsible for any injury.

A physical examination is also required by the W.I.A.A. before these athletes can participate in any sport. That is supposed to be paid by the parents.

Dr. Rector (Appleton): This is not brought before the profession or the society as a matter of material gain for the profession. It is a matter of closing up one of the loopholes for which the public feels the profession is responsible to carry the burden rather than the individual or the society in general.

Your educational department has made athletics a part of your curriculum in all schools and the fee received in such cases does not exceed, in the majority of cases, more than twenty per cent of what the fee should be. They are paying all other employes for supporting the school system. We are paying taxes, and it is a matter of justice in stopping one of the loopholes relative to the responsibility of the profession and, greater still, for the education of the public that those things are the public's responsibility. That is the reason for presenting this to the Society,—not for the ultimate returns in direct gain.

Dr. Krahn (Oconto Falls): Inasmuch as it is necessary for each athlete to have a physical examination before he can participate, it would seem to me the right procedure to begin would be by hav-

ing some method of compensation for these examinations. There are probably in the high schools forty to fifty per cent of the males participating in some form of athletics. Each one of these must be examined not alone for football, basketball, baseball or track, but sometimes for several, requiring three or four examinations a year. I would suggest therefore that a fee for examination be incorporated in this resolution. I make that in the form of an amendment.

Dr. Sisk: I second the amendment.

Speaker Gundersen: Is there any discussion on the amendment?

Dr. Cunningham: I examine probably fifty or sixty of these boys every year. I have never charged them anything and I do not believe I would like to be compelled to charge them anything. This examination is not an extensive examination, and I do not see any reason why we should charge anything for it. It is not the same as an insurance examination or an extended examination. It takes very little of your time. When they come in, you know most of them to begin with. I think it is a matter of duty to take care of the boys.

Dr. Rogers (Neenah): We examine in rotation every three years. The last examination was for 117. The school has a fee of four dollars. That includes all kinds of sports. It seems that W.I.A.A. takes care of that on a fifty per cent basis of what you generally charge. The main thing is, I think, we should have some form of insurance against the games themselves. For example, if the bleacher falls down or anything of that sort you have not anything coming to you at all. I think some form of insurance for a particular game should also be put through. The last case I had was very difficult. It covered treatment over a month and there was no insurance; none for spectators in other words. I think something should be done in the legislature regarding that matter.

Speaker Gundersen: Dr. Krahn, will you restate your amendment?

Dr. Krahn: I move an amendment to the former resolution to the effect that some form of compensation be provided for physical examination of an athlete in order to enter an athletic sport in the high school.

I could qualify that by saying for two years I have examined all the high school boys in my town. I do not believe another doctor has examined them in spite of the fact there are two others there. I concur with the doctor from Appleton in believing it is an imposition. Not that we are not perfectly willing and glad to do it but still it is another one of those things tending toward greater respect. If we allow them to expect one thing, they get to expect too much.

Speaker Gundersen: All those in favor of the amendment will please vote "Aye"; contrary "No". The amendment is carried.

The question is on the original motion as amended. Is there any discussion? If not, those in favor of the motion, as amended, will say "Aye"; opposed "No". It is carried.

Appropriation for Investigator

Dr. Sargent: Resolution Number 5, introduced by Dr. Fidler of Milwaukee.

"WHEREAS, The State Board of Health is to be highly commended for the work done by its investigations in eliminating violators of the Medical Practice Act; and

"WHEREAS, The need for the continuance of this work is imperative; and

"WHEREAS, The present appropriation is inadequate; be it

"*Resolved*, That the Council of the State Medical Society instruct its Committee on Public Policy to introduce legislation in the next session of the state legislature which will provide at least $7,000.00 per annum for this valuable work."

The Committee concurs in the sense of the resolution, although it offers the following amendment:

That the word "instruct" be replaced by "recommend that" so it will read in the last paragraph: "BE IT RESOLVED, that the Council of the State Medical Society *recommend that* its Committee on Public Policy introduce legislation in the next session of the state legislature which will provide at least $7,000.00 per annum for this valuable work."

On behalf of the Committee, I move the adoption of this amendment.

. . . The motion was seconded by Dr. Vander Kamp of Tomah and carried . . .

Dr. Sargent: On behalf of the Committee, I move the adoption of the resolution as amended.

. . . The motion was seconded by Dr. McMahon of Glenwood City and carried . . .

Practice of Radiology and Pathology

Dr. Sargent: Resolution Number 6, introduced by Dr. Murphy of Milwaukee at the request of the Board of Directors of the Medical Society of Milwaukee County.

"WHEREAS, The employment of radiologists and pathologists by hospitals on the present basis has been protested by physicians engaged in the fields of radiology and pathology; and

"WHEREAS, Such practice is inimical to the best interests of the public and the medical profession in general; and

"WHEREAS, These evils and grievances complained of have already been investigated by the American Medical Association; and

"WHEREAS, The American Medical Association's House of Delegates, meeting at Cleveland in 1934, modified the Code of Ethics of the American Medical Association, and at Atlantic City on June 10, 1935, adopted the following resolution:

" 'The radiologist's remuneration may, without violating the principles of Medical Ethics, be in the form of salary, fees, or commission but that in no case shall an economic arrangement be operative which is designed to provide a direct profit to the institution from private patients.'; and

"WHEREAS, There prevails a trend in some communities for certain lay and corporate institutions to extend their activities into the practice of the various branches of medicine in a similar manner; be it

"*Resolved*, That the House of Delegates of the State Medical Society of Wisconsin affirm the resolutions of the American Medical Association."

The Committee recommends the adoption of this resolution and on behalf of the Committee I move its adoption.

. . . The motion was seconded by Dr. Gramling of Milwaukee . . .

Dr. Sisk (Madison): Mr. Speaker, this matter has been a subject of discussion in the radiological section and in the group of pathologists, members of this Society for a good many years. I am going to state the proposition by asking two or three questions.

Have you, in your community, a private hospital or a hospital of any kind to which an injury case may be sent where the intern takes charge of this case, does the necessary first aid, cleaning of injury, taking of necessary sutures, putting on of splints and so forth, without referring this case to a private physician for the care, the hospital making a charge or making no charge if you please, but in no case is this patient referred to a private physician?

Question Number 2. Do you, as private practitioners, refer your injury cases to private hospitals, request an x-ray examination, have that hospital make a set of films, place them upon the illuminator for you to make an interpretation of your own, and you be required to make this interpretation? The hospital does not make this interpretation for you, but at the same time charges your patient a fee commensurate with those charged by the specialist and the hospital in the same line of practice in other communities, making it an excessive cost to your patient for the care of that injury; the hospital collecting a fee for service not rendered in this particular, and making it more difficult for you to collect a fair fee for the work you are doing in that particular?

Question Number 3. Have you in your community a private hospital or a hospital of any character on which there is a member of the permanent staff in the practice of private general medicine doing a type of general practice for which he collects a substantial fee, where if he must go to the private hospital this permanent staff member of this private hospital is in competition with the general practitioner and this private practitioner on the permanet staff is turning in income to that hospital, prostituting, if you please, his own welfare to the welfare of the hospital in competition to the staff members who are in private practice in that city?

There are many other questions similar to that concerning the practice of general medicine, not only x-ray work, not only pathology, not only those injury cases which incidentally come in which are common practice in some communities.

I can cite you numerous examples of those practices, not in Milwaukee, not in Madison, but other communities. I should like to see this subject cracked open for discussion. I should like also to make an amendment to the recommendations of this committee to the effect:

That it be resolved further that the House of Delegates of the State Medical Society of Wisconsin recommend that component county medical societies institute grievance committees to at once take measures to investigate and correct the present trends of private practice by hospital and other lay organizations.

. . . The amendment was seconded by Dr. Vander Kamp of Tomah . . .

Dr. James Jackson (Madison): Although I am not a delegate, I should like to speak on this question as a member of the Society. I think this resolution is very condemnable in the interest of the doctor who is endeavoring to make a living in the practice of medicine. It seems to me if we are going to allow this practice to continue it is just one more step to take our livelihood away from us. Maybe to some of is it does not mean very much but to a great many roentgenologists, pathologists and industrial accident surgeons it means a great deal.

As Dr. Sisk pointed out, the patient comes to the hospital as an injury case. Maybe it is only a mild injury, but it means five dollars to some poor doctor. Does he get it? No. The hospital gets it. Gentlemen, if this thing is going to continue, it seems to me it is one more step when the hospitals are going to say, "Well it works very nicely. It totaled up to twenty-five dollars. It would be a nice thing next year to appoint not an intern or resident but a doctor at five thousand dollars," taking it directly out of your pockets. That is the answer. There is no other answer, and we are going to have more.

I do not see what this committee is afraid of in not directing this House of Delegates very strongly to ask their county societies to appoint those committees.

Dr. Norbert Enzer (Milwaukee): I crave the indulgence of the floor for a few minutes, Mr. Speaker and Members of the House of Delegates: I am not a member of the House but I should like to speak on the motion and resolution from the standpoint of the pathologist and radiologist on two points.

Emphasis is being placed in this resolution of an economic character. This resolution implies interference on the part of the institutions for the earning of a livelihood by members of the profession. At the risk of permitting that attitude to overshadow what I think is a still more important principle, I should like to emphasize that the effect of this resolution, if not carried out in the terms of the American Medical Association Code of Ethics, will further interfere with the right practice of medicine, because it will jeopardize and exclude the continuing of the activities of the radiologist and pathologist

in the development of hospitals as medical institutions and institutions of medical education.

It goes without saying to the most casual observer that the growth of hospitals in this country in the last twenty-five years as institutions for the purpose of training physicians has devolved largely upon the shoulders of what we choose to call the higher mind of medicine, the institutional man.

So there are two issues here. One, the present state of affairs does not permit the earning of a respectable livelihood in terms of the Code of Ethics of the American Medical Association. Second, the continuance of that type of activity is going to depress the proper activity of radiologists and pathologists in the development of medicine itself.

I should further like to call attention to an evil which is rampant throughout the country. Radiologists and pathologists practice under a stabilized fee condition which in itself is not to be condemned but it is to be condemned when lay organizations, often at the behest of the profession at large, control the fees, stabilize the fee established for the work done by radiologists and pathologists.

The meaning is this. We have already seen the time when the profession at large unthinkingly has permitted lay institutions to dictate to the medical profession and to establish for the lay public an economic value for the work done in medicine by radiologists and pathologists.

Dr. Krahn (Oconto Falls): I appreciate the fact that in the larger centers and communities where they have radiologists and pathologists this is a fine way to take care of this, but the extension of laboratory technician radiology and pathology is now being carried to the smaller communities. The people in these smaller communities must rely on their local physician, the country doctor, if you please, to furnish them a diagnosis and just lately it has devolved upon the general practitioner to secure someone to make these laboratory diagnoses for them.

These diagnoses do not only include x-ray but in smaller communities they include the taking of blood chemistry, sugar analysis of urine and so forth and metabolism tests. How are the physicians in the smaller communities, the country doctors, if you choose, going to adapt themselves to this resolution in anticipating a thing of this sort? In Oconto, where there are twelve doctors working together very nicely, we have considered the advisability of our hiring a technician and appointing one man as a radiologist or pathologist in spite of the fact we have none in our county.

Just how will that interfere with your present resolution? I believe that is applicable to some of the smaller communities represented here throughout the state. I do not see how we can consistently vote for a resolution of this kind.

Dr. Sisk: May I interject a personal thought? It does not make any difference what sort of a device you have, but let the medical man control the medical practice and you set whatever fees, employ whatever technician you want, but let the physicians in that community control the prices set for that service. Why pay the hospital ten dollars for a diagnosis of fracture of the forearm when you and the committee of doctors can make the same diagnosis and collect the fee instead of having it go to the hospital which is not able to offer that consultation service?

Let it be done by your local committee. The recommendation is not that this House of Delegates set up the machinery as to the intimate details but delegate a grievance committee to the local society to solve that situation according to their own solutions.

Dr. Krahn (Oconto Falls): In regard to hospitals having their own x-ray department, shall they maintain that with their laboratory technician and charge their own fees, or shall that be set up as some other particular thing? How shall this be determined if they have their own laboratory equipment?

Dr. Sisk: May I answer giving my own opinion? Your grievance committee with your hospital will decide as to what the practice shall be, so it will be satisfactory to all physicians in that community, in order that they may control the policies of the practice of medicine. Let it be a home rule proposition satisfactory to the physicians in that community.

Dr. Gramling: I rise to emphasize somewhat that which Dr. Enzer said. I really think there is a great point involved, and I think this House of Delegates should absolutely stand up and support the amendment and the original resolution as brought in by the committee, because if you allow the hospitals to enter the private practice of medicine, which they are doing, gentlemen—I do not care what you say or think they are doing—we should absolutely curb that once and for all.

If you can hire the pathologist, it is not a far step to hire the surgeon, the obstetrician and the man in internal medicine to put him in charge.

Gentlemen, I do not care how noble a man's idea is who goes out to establish a hospital and what religious fervor he may have,—this hospital would be just a bit of brick and mortar if it were not for a live medical profession.

The medical profession should stand up for its rights. Here is a principle involved and I believe the medical profession is doing itself a great injustice and I believe this organization would be weak-kneed if it did not support heart and soul this resolution as presented by the committee.

Dr. Jackson (Madison): Perhaps Mr. Crownhart could illuminate on one point. Are not many of these hospitals incorporated? How can a corporation practice medicine in the state of Wisconsin when there is a statute on the books which will not allow a corporation to practice medicine? I do not know whether they are all associations or how many are corporations but there is a statute in the state which will not allow a corporation to practice medicine. I am certain of that.

Secretary Crownhart: Dr. Jackson, I do not

know exactly how many hospitals are incorporated. You are correct in your statement that the supreme court of many states, presumably this one, does not hold that corporate practice is in the public interest. Corporations are not licensed after examination. The individual is the one who is licensed and that is the one that the courts and the laws of the land control. For that reason, they forbid corporate practice. I presume most of the hospitals are incorporated.

Dr. Lettenberger (Milwaukee): As long as you are in the mood, why stop with this. Why not stop the nurses giving anesthetics?

Speaker Gundersen: The question is on the amendment. All those in favor of the amendment will signify by saying "Aye"; contrary "No". The amendment is carried.

The question is now on the original motion as amended. Is there any discussion? All those in favor of the motion as amended will signify by saying "Aye"; opposed "No". The motion, as amended, is carried.

Dr. Sargent: Resolution Number 7, introduced by Dr. Sisk of Madison.

"WHEREAS, The American Medical Association, in 1934, in Cleveland, Ohio, amended the principles of Medical Ethics by adding thereto certain provisions, to-wit:

1. Lay organizations. " 'It is unprofessional for a physician to dispose of his professional attainments or services to any lay body, organization, group or individual by whatever name called, or however organized, under terms or conditions which permit a direct profit from the fees, salary, or compensation received to accrue to the lay body or individual employing him. Such a procedure is beneath the dignity of professional practice, is unfair competition with the profession at large, is harmful alike to the profession of medicine and the welfare of the people, and is against sound public policy.'

"WHEREAS, It appears that the machinery for enforcing these amendments to the principles of Medical Ethics is inadequate; now therefore be it

"*Resolved*, By the House of Delegates of the State Medical Society of Wisconsin, assembled in the city of Milwaukee, that the President of the State Medical Society shall appoint three members of the Society as a committee to stimulate local investigation of alleged violation of medical ethics and to act as an advisory committee to local investigating committees; and be it further

"*Resolved*, That county medical societies be required to appoint and maintain investigating committees to investigate into alleged violations of medical ethics in their respective counties, to keep records of such investigations, to make reports and recommendations to their local medical societies and to file a copy of said reports and proceedings in the office of the Secretary of the State Medical Society; further

"*Resolved*, That such investigation be made in such manner and form as may be recommended by the advisory committee appointed by the President of the State Medical Society."

In view of the fact that the intent of this resolution is a duplication of the previous resolution and with the acquiescence of Delegate Sisk, the Committee recommends that this resolution be laid on the table. On behalf of the Committee, I move that this resolution be tabled.

Dr. Sisk: I second the motion.

. . . The motion to table was carried . . .

Dr. Sargent: In the course of its deliberations concerning the above resolutions, certain other matters came to the attention of this Committee and it offers for your consideration the following resolution:

Additional Councilors

"WHEREAS, There is before the House an amendment to the Constitution to be acted upon in 1936, which amendment restates that section having to do with numbers and terms of officers; and

"WHEREAS, It appears to your Committee on Resolutions that thought should be given to a further amendment providing that in any councilor district embracing a membership of 250 or more there might well be an additional councilor for each additional 250 members or major fraction thereof; therefore be it

"*Resolved*, That the House instruct the Secretary to prepare a suitably worded amendment, of which this resolution shall be official notice, presenting such amendment to the House for discussion and action at the 1936 meeting."

Mr. Speaker, on behalf of the Committee I move the adoption of this resolution.

. . . The motion was seconded by Dr. Gramling of Milwaukee and carried . .

Retiring President

Dr. Sargent: Not wishing itself to promote any definite action, the Committee on Resolutions submits to the House the following matters for its consideration.

First, it is the feeling of the Committee that the Society as a whole suffers a great loss under the present system whereby its retiring President drops completely out of the official organization at the end of his presidential term. The Committee feels that the Society should give consideration to the establishment of an ex officio membership on the Council, to be occupied by the retiring president for a period of one year following his retirement and be accompanied by the privilege of a vote.

Speaker Gundersen: What is your pleasure?

Dr. Cunningham: I think, according to our by-laws, at the present time all ex-presidents are ex officio members of the Council.

Secretary Crownhart: Mr. Speaker, according to custom, the ex-president during the one year immediately following the expiration of his former term as president, is invited to Council meetings but is not an ex officio member and has not the right of vote as this suggestion includes.

Dr. White (Rice Lake): I move the adoption of this recommendation.

. . . The motion was seconded by Dr. Christofferson of Colby and carried . .

Budget for President

Dr. Sargent: Second, while there are certain provisions covering certain of his actual costs, the President of this Society is called upon to spend a considerable sum of his personal funds in carrying out the responsibilities of his office. The Committee feels that the Society should give some consideration to this subject and the possibility of setting aside some general expense fund to be placed in the hands of the President for expenses incurred during his term of office.

Speaker Gundersen: What is your pleasure? Do I hear a motion?

Secretary Crownhart: Mr. Speaker, I think if the House wishes to adopt that suggestion, the proper form would be to refer it to the Council as constituting the recommendation of the House, the Council being the budget authority.

Dr. Jermain (Milwaukee): I so move.

. . . The motion was seconded by Dr. Sisk of Madison and carried . . .

Scientific Exhibits

Dr. Sargent: Third, the Committee feels that the scientific exhibits on display at each one of our annual meetings might possibly be improved if some system were set up whereby certificate of awards or prizes for excellency were offered to those competing.

Speaker Gundersen: What is your pleasure? Do I hear a motion that this might be referred to the Committee on Scientific Work?

Dr. Lindsay (Madison): I so move.

. . . The motion was seconded by Dr. Hoffmann of Hartford and carried . . .

Dues for 1936

Dr. Sargent: Each year the Committee on Resolutions is given the task of recommending to the House of Delegates the dues that shall be charged the members of the Society during the ensuing year.

Your Committee has had before it the financial statement of the Treasurer, as well as the budget proposed for the Society for the coming year. It would call attention to the following facts:

First, that over the years and up until 1925 the Society was able to build up a financial reserve approximating $25,000.00; that since that time the activities of the Society were such as to consume practically all of its income, maintaining approximately this same reserve; that this existed until the present year when, because of increased demands made upon the organization in behalf of its members, it has been necessary to dip into the reserve of the Association to the amount of somewhere between $3,500.00 to $5,000.00

Second, that the budget for the coming year has been studied carefully by the officers of the Society and that, careful as they have been to keep the various expenses of the organization at an effective minimum, the probable expenses of the Society during the coming year are such as to require a further dip into its already diminishing reserve if dues are to be continued on the same basis of $12.00 a year.

Third, that the Council, feeling the wisdom of such a move, early in 1932, decreased the dues of the membership from $15.00 to $12.00.

On the basis of these and other facts, your Committee recommends that the dues of the membership in this Society for the coming year shall be returned to the regular $15.00 per year basis.

On behalf of the Committee I move that the membership dues for the coming year be set at $15.00.

Speaker Gundersen: Is there any discussion? . . . . . If not, those in favor of the motion signify by saying "Aye"; opposed "No". The motion is carried unanimously.

Dr. Sargent: During its deliberations, your Committee on Resolutions has been favored with the presence and counsel of a large number among our membership. I wish to take this opportunity of thanking them for their helpful counsel.

Respectfully submitted,

COMMITTEE ON RESOLUTIONS,

Dr. J. C. Sargent, Milwaukee, *Chairman*,
Dr. D. J. Twohig, Fond du Lac,
Dr. A. E. McMahon, Glenwood City,
Dr. L. W. Hipke, Milwaukee,
Dr. F. E. Butler, Menomonie.

I move the adoption of the report of the Committee as a whole.

. . . The motion was seconded by Dr. Powers of Milwaukee and carried . . .

Speaker Gundersen: We will now hear the report of the Committee on the Reports of Standing Committees, Dr. Rector of Appleton, Chairman.

Report of Standing Committees

Dr. Rector: The Committee on Reports of the Standing Committees recommends the adoption of the report of the Committee on Medical Education and Hospitals.

We heartily concur in the sentiments of the Committee on Medical Education and Hospitals with the selection of Dr. W. S. Middleton as Dean of the Medical School, University of Wisconsin, as having met with the heartiest approval of the entire membership of the State Medical Society of Wisconsin.

We move that the House adopt the report of the Committee on Medical Education and Hospitals.

. . . The motion was seconded by Dr. Mauermann of Monroe and carried . . .

Dr. Rector: Your Committee commends the efforts that have been expended by the Committee on Coordination of Medical Services. We feel that the good work of this committee should be continued. It is through the operation of this committee that the interested cooperation may be evidenced between the medical school, the Wisconsin General Hospital, and the medical profession at large.

The committee moves the adoption of their report.

. . . The motion was seconded by Dr. Pomainville of Wisconsin Rapids and carried . . .

Dr. Rector: The Committee on Reports of Standing Committees recommends the adoption of the report of the Committee on Medical Defense.

This committee feels that the services of the Committee on Medical Defense should be brought before each individual member throughout the County Medical Societies and that continued effort be exercised to enlarge the membership in this activity, as we believe the greater participation will materially increase their professional protection.

The committee moves the adoption of this recommendation.

. . . The motion was seconded by Dr. Powers of Milwaukee and carried . . .

Dr. Rector: Your Committee commends the work of this committee and makes as its recommendation to the House of Delegates that the methods of securing this historical data be continued as outlined in their report.

The committee moves the adoption of this report.

. . . The motion was seconded by Dr. Cunningham and carried . . .

Dr. Rector: This Committee has read in detail the report of the Committee on Public Policy, and wishes to take this opportunity to commend the activities of this Committee and the results obtained as a result of their efforts.

This Committee wishes to particularly commend the Committee on Public Policy in their successful passage of the bill known as "Medical Grievance Committee Bill" and the bill known as "The Powers of the State Medical Society".

We feel practically inadequate to state in words the appreciation that should be tendered to this committee by the House of Delegates. Certainly the record of their achievements speaks for them.

The Committee moves the adoption of this report.

. . . The motion was seconded by Dr. Irwin of Baraboo and carried . . .

Dr. Rector: The Committee on Reports of Standing Committees recommends the adoption of the report of the Committee on Scientific Work and wishes to take this opportunity to commend this Committee on their efforts to make available to members of the Society the recent developments in Scientific Work, and we move you the adoption of the report of the Committee on Scientific Work.

. . . The motion was seconded by Dr. Powers of Milwaukee and carried . . .

Dr. Rector: We feel that the work of the Cancer Committee should be recommended, and we feel that the Cancer Clinics, as developed by the Cancer Committee, served a great public need and developed within the profession a sincere appreciation of the problems of cancer.

Your Committee feels that the work of the Cancer Committee should be continued and that their specific efforts be placed toward the end that cancer mortality be reduced.

The Committee moves the adoption of the report.

. . . The motion was seconded by Dr. Tufts of Milwaukee and carried . . .

Dr. Rector: The Committee is pleased to commend the Editorial Board on the improved appearance of our State Medical Journal. The merits of this change can be expressed by calling your attention to the fact that since the Wisconsin Medical Journal increased the attractiveness of our Journal, some twelve states have followed the Editorial Board's example.

We commend the policy of the Editorial Board and move you the adoption of their report.

. . . The motion was seconded by Dr. Irwin of Baraboo and carried . . .

Dr. Rector: The recommendation of the Committee on the report of the Standing Committee on Health and Public Instruction is as follows: This Committee recommends their activities in public instruction through the medium of the radio, press service and Hygeia.

. . . The motion was seconded by Dr. Lindsay of Madison . . .

Dr. Cunningham: Mr. Speaker, it seems to me we have a great many expenditures at the present time, that most of the principal newspapers are carrying medical columns, there are a good many talks over the radio and we are doing rather superficial work at the present time. It is costing us a good deal of money to carry on this work. Our postage alone runs at about five hundred dollars a year. It requires a good deal of office work, an increase of office force. I hardly believe we are accomplishing enough to justify continuing this added expense considering the expenses we have at the present time. It seems to me this is one department where we could well curtail our general expense very materially.

Speaker Gundersen: Do you move rejection of the report, Dr. Cunningham?

Dr. Cunningham: I object to the report, move rejection.

Dr. McMahon: I do not think this is the time to curtail an activity that calls the attention of the general public to the ethical profession in a general way, and I think we should continue to do as we have done.

Dr. Rector: Your Committee has spent a very full day on these subjects as presented. While we have read all the reports of the committees and gone into them thoroughly, we have not been able to establish on all points in our own mind the wisdom of their being carried out. We felt these reports had come from committees that had expended a great deal of time on them and felt that heed should be paid to the work carried out.

Your Committee is well aware of the fact that there has not been a committee report submitted to us that has not been thoroughly gone into, and if the House wishes to make any change in the program, I believe that should come from our budgeting committee through the Council. They are in

better touch with what we are able to do and what we should do than this House of Delegates.

Speaker Gundersen: There is a motion to reject by Dr. Cunningham. Is there a second? . . . . If not, are you ready for the question on the original motion? (Question called for) All in favor of the motion signify by saying "Aye"; opposed "No". The motion is carried.

Executive Session—Medical Economics

Dr. Rector: Mr. Speaker, this brings us to the report of the Committee on Medical Economics. I rather feel hesitant opening the discussion on this subject until we have time to carry it through. I would not like to make a break in this report and take it up in another meeting. If we are liable to have considerable discussion, which I think we will and should have, I am wondering whether we had not better leave this open for another session.

Speaker Gundersen: The Chair will entertain a motion that we go into executive session.

Dr. Irwin (Baraboo): I so move.

. . . The motion was seconded by Dr. Cunningham . . .

Dr. Sisk (Madison): If we go into executive session, does it eliminate every person who is not a member of the House of Delegates?

Speaker Gundersen: No, it eliminates those not members of the Society. Are you ready for the question? All those in favor of the motion will say "Aye"; opposed "No". The motion is carried.

Secretary Crownhart: Will the staff of the Secretary and Mr. Wiprud act as sergeants-at-arms to see that the House is ready to proceed?

Dr. Rector: Report of the committee on the reports of the standing committee on Medical Economics. Your Committee has carefully read the supplementary report of the Committee on Medical Economics and commends the Committee for its thoughtful study and the work consumed in the preparation of this report in its entirety and recommends to the House of Delegates that this report be adopted in its entirety. We wish, however, to emphasize particular paragraphs contained in this report. Specifically do we recommend to the House a re-statement of the position taken by the House in the 1930 session. This statement reads as follows:

"The care of the indigent is a community obligation. The physician should receive a reasonable compensation therefor and that charitable work that will always characterize the profession of medicine should be continued to that class of individuals who are endeavoring, under great handicaps, to maintain their independent financial status.

"The Society disapproves any system which provides a single practitioner to care for the indigent, except such as may be in institutions, for the reason that such a system is not conducive to securing a proper public service.

"We recommend that each component society investigate, in the light of its own peculiar requirements, those plans and suggestions advanced to provide a better service for the indigent sick."

We desire a thorough emphasis to be placed on the following:

"Whether care of the indigent be financed from federal, state, or local funds, jointly or singly, your Committee contends that the principle of free choice of physician should be maintained for all time in the future."

We recommend that on Page 2, Paragraph 4, Line 8, the word "poor" be deleted. This is purely a clerical correction.

We recommend that special stress and emphasis be placed on statement contained in the last paragraph of Page 2 which reads as follows:

"It is desirable and important that frequent conferences be held by the representatives of component County Medical Societies with relief officials in an effort to establish local medical relief programs mutually agreeable to physicians and relief officers and advantageous from the viewpoint of adequacy of medical service to the indigent."

Page 3, Paragraph 2: We recommend that the component societies comply with the provisions in their entirety. We also wish to call attention to a clerical error in Line 4 of Paragraph 2, which should read "form" in place of the word "from".

Page 3, Paragraph 3: Your Committee recommends the adoption of the material contained in this paragraph and with special emphasis on the sentence which reads as follows:

"The Committee believes, however, that specific plans should be submitted to the Council in order that each component society may have the benefit of their constructive advice and aid."

Your Committee specifically recommends the adoption of 3a on Page 4.

We also wish to stress special emphasis on all matters contained in 3b, Page 4, and recommend its adoption in full.

Page 4, Paragraph 4: "Distribution of Medical Service". Your Committee recommends the immediate change in the by-laws to conform with the report of the Committee on Medical Economics.

Page 5, 4a: We specifically recommend the Council be given this power.

Page 5. Paragraph 5. Your Committee recommends that serious consideration be given to matters contained in this paragraph and asks for the fullest discussion of the matters stated therein as time will permit.

Respectfully submitted,

A. E. Rector, *Chairman*,
H. J. Gramling,
Charles W. Giesen.

This special committee report is not a matter of "soft soaping" the Economics Committee. We have gone through every phase of their carefully worded report. We see instances that should be approached with due caution. We fear hurried action may sidetrack the scope of the matter in its intent and its effectiveness.

We do feel that Page 5, Paragraph 5, Distribution of Medical Services, should be given the fullest dis-

cussion. "While it has always been the self-imposed obligation of the profession of medicine to furnish medical service to all at a cost within their individual means to meet, as a result of continuous propaganda over many years by those who seek to tear down the standards of medicine, there is today prevalent among some of the laity the thought that the services of medicine are only to be secured at a fixed price.

"To the end that organized medicine may continue most effectively to discharge its obligation to the public and profession alike, your Committee submits herewith a proposed official announcement to be furnished to each member of the Society upon his own request."

Your Reference Committee feels that portion of the report of the Committee on Economics, as presented last night, should be stressed.

We feel there should be thorough discussion, thorough educational program among the profession before any attempt is made in carrying out the matter of 3a and 3b on Page 4.

Under Paragraph 3, Page 4, Care of Low Income Groups, your Committee on Medical Economics has safeguarded you in many ways, but we feel that matter should be discussed seriously here tonight and we feel that no society should proceed without thoroughly prepared plans. Reference is made to the larger community where they, the medical credit bureau, which can provide the data, as for example, Milwaukee, but when you go into the smaller communities should this be attempted by smaller societies? We feel they will rely too much upon social service organizations even though it be partly under the direction of the medical society.

If that part of the report is adopted, we ask that caution be used on the part of the unprepared community in being in too much of a hurry to put this matter into action.

The committee submits the report in its entirety and moves its adoption.

. . . The motion was seconded by Dr. White of Rice Lake . . .

Speaker Gundersen: The matter is now open for general discussion.

Dr. Sisk: May I ask the Chairman of the Committee to interpret the first paragraph on Page 5, underscored, beginning with Line 4?

Dr. Rector: I shall ask a member of the Committee on Medical Economics to interpret that.

Dr. Fox: As I understand, you desire an interpretation of the following: "Or so conduct himself as to defeat or tend to defeat the purposes for which the Society is organized and is operating."

If this is adopted, upon the recommendation of any county society, a member can be dropped from the society, and that is what this implies. In other words, if a member of a local society undertakes to do contract practice without the consent of the local society he may be dropped from his society. Does that it explain it?

Dr. Sisk: It does.

Dr. Fox: Mr. Chairman, I think it would be best to discuss this in two parts, leaving Paragraph 5, Page 5, for separate discussion. They are entirely two different subjects.

Speaker Gundersen: We are ready for discussion of the first part of the report.

Secretary Crownhart: Mr. Speaker, would it facilitate the discussion of the House if the Secretary outlined very briefly, preparatory to the discussion, each section of the report by itself? (The Secretary was so requested).

The first section reads:

"*To the 1935 House of Delegates:*

"Officers of the Society and members of your Committee on Medical Economics have been studying throughout the year various proposals submitted from within and without the membership. We have also watched with pleasure the favorable progress of Bill 733a and its enactment into law as Chapter 350 of the Laws of 1935. In view of this recently enacted legislation and other material on which our studies have been completed, we have the following supplementary report and recommendations.

1. *Care of the Indigent.* "At the 1930 session of your House of Delegates, in acting favorably upon the report of the Special Committee on the Distribution of Medical Services, the House accepted the following formal statement:

" 'The care of the indigent is a community obligation. The physician should receive a reasonable compensation therefor and that charitable work that will always characterize the profession of medicine should be continued to that class of individuals who are endeavoring, under great handicaps, to maintain their independent financial status.

" 'The Society disapproves any system which provides a single practitioner to care for the indigent, except such as may be in institutions, for the reason that such a system is not conducive to securing a proper public service.

" 'We recommend that each component society investigate in the light of its own peculiar requirements, those plans and suggestions advanced to provide a better service for the indigent sick.'

"One of the reasons for difficulty in perfecting arrangements between component county societies and county governments for the care of the indigent sick was the failure of the charter law of the State Medical Society definitely to grant to the Society and its component groups power to enter into such contracts. Contracts were entered into by three component societies after careful wording by legal counsel of the Society, but lack of definite authority was not conducive to securing that attention and cooperation of the public which otherwise might have been had.

"Chapter 350 of the Laws of 1935 states:

" '(148.01) (3) The State Society, or a county society, in manner approved by the state society, may undertake and coordinate all sickness care of indigents and low income groups, through contracts with public officials and with physicians and others,

and by the use of contributions, cooperative funds and other means, provided only that free choice of physician within such contracts shall be retained and that responsibility of physician to patient and all other contract and tort relationships with patients shall remain as though the dealings were direct between physician and patient.'

"It is impressed upon your Committee that while free choice of physician was a guarantee of the Federal Government under the Federal Emergency Relief Administration, there is already manifest a tendency among county governments to abandon this principle whenever federal relief funds withdraw from the picture. The fact that the principle of free choice was recognized and made mandatory under the Relief Administration in Wisconsin is plainly indicative of the fact that such reasonable free choice was recognized to be fundamental to any degree of proper service to the indigent.

"Whether care of the indigent be financed from federal, state, or local funds, jointly or singly, your Committee contends that the principle of free choice of physician should be maintained for all time in the future.

"Your Committee recognizes that large numbers of county governments in this state are in a period of financial stringency and that any original future agreements between county medical societies and county governments for the care of the indigent must be at rather nominal figures. The wise and safe policy for each County Medical Society to pursue is to establish, through frequent conferences and cooperative efforts, friendly relations with poor relief officials to acquaint them with the better medical service to be had by the adoption of the principle contained in Chapter 350, Laws of 1935.

"It is desirable and important that frequent conferences be held by the representatives of component County Medical Societies with relief officials in an effort to establish local medical relief programs mutually agreeable to physicians and relief officers and advantageous from the viewpoint of adequacy of medical service to the indigent.

"Recognizing that, with the gradual withdrawal and contraction of the federal relief program, local governmental units again gradually will assume direction of local programs for the care of the indigent sick, we recommend that: The House reaffirm its quoted statement of 1930, as representing its continued position on the subject of care of the indigent." (end of first section of committee report).

This section simply means that your Committee on Medical Economics is reaffirming and restating the position of the Society taken as early as 1930. In the matter of care of the indigent at such times as federal relief funds withdraw from the picture, the committee believes that free choice of physician should be continued under a plan that is mutually agreeable between a county medical society and any county form of government. It is an effort to continue, after federal relief funds withdraw from the picture, free choice of physician.

Speaker Gundersen: Do I hear any discussion?

Dr. Sisk: Do I understand that any professional service rendered to the indigent or poor relief must be taken care of by the application of Chapter 350, Laws of 1935?

Secretary Crownhart: In the first place, not if they are hospitalized in an institution. In the second place, not if the County Medical Society has not elected to perfect such a plan; otherwise yes.

Dr. Lindsay (Madison): Just what do you mean by being hospitalized?

Secretary Crownhart: We can visualize some counties in which they have a county poor farm and appoint some one physician to inspect from time to time the inmates, take care of their various ills.

Dr. Lindsay: But not all commitments to hospitals.

Secretary Crownhart: No.

Speaker Gundersen: Are you ready for the question on the matter of adopting the first part of the report down to Paragraph 2, Page 3, as read and explained to you by our Secretary? All in favor will please vote "Aye"; opposed "No". That section of the report is adopted.

Secretary Crownhart:

Paragraph 2, Page 3. *Care of the Indigent Sick—Types of Contracts.* "To enable any county medical society to enter upon the proper contract, the Secretary of the State Medical Society is hereby instructed, upon request, to provide such component society with such contract form as may be necessary to comply with local conditions as stated by officers of such component society. No such contract shall be entered upon except under the provisions of Chapter 350 of the Laws of 1935."

The Committee recommends that to enable any county medical society that wishes to perfect a system of free choice, after federal funds withdraw, the Secretary of the State Society should be instructed to aid them in framing, from a legal point of view, any necessary agreement.

Speaker Gundersen: Do I hear discussion? Are you ready for the question? All in favor of the adoption of Paragraph 2 entitled *Care of the Indigent Sick, Types of Contracts* say "Aye"; contrary "No". It is adopted.

Secretary Crownhart: Mr. Speaker, referring to Paragraph 3, Page 3, *Care of Low Income Groups—Social Service*, your Committee recognizes that in some of the larger communities of the state where it is difficult for the average family physician to know intimately the life, dependence and the financial status of his patients, it may be deemed wise by the component county medical society to establish some sort of an investigative bureau entirely under the control of the profession for the purpose only of providing credit information to the physician on the one hand, and, on the other hand, helpful suggestions to the patient in budgeting, that both may be treated with the utmost fairness.

The committee believes, however, that before any such plan be put into effect it should be submitted

to the Council but endorses at this time the general principle in the event any component society wishes to undertake that proposal.

Speaker Gundersen: Is there any discussion? If not, all in favor of the adoption of Paragraph 3, Page 3, signify by saying "Aye"; opposed "No". The motion is carried.

Secretary Crownhart: At the top of Page 4, appears Paragraph 3a, *Care of Low Income Groups —Consulting Service.* I shall read to you the paragraph: "In the event that component societies submit plans for the distribution of medical service under the terms of Chapter 350, Laws of 1935, your Committee recommends that the Council, or Executive Committee thereof, specifically be authorized to employ on a per diem basis competent physicians or laymen to investigate the needs and feasibility of the specific plan under discussion, reporting their findings to the Council. The purpose of this recommendation is to grant to the Council broad powers for investigating the public service to be attained under any plan brought forward."

Your Committee recommends that the Council have the power to employ on a per diem basis, if they deem it necessary, any physician or layman to send to such a county to investigate any portion of the plan or report that is made, that the Council may have, from an independent source, the fullest information upon which to act.

Speaker Gundersen: Is there any discussion? If not, are you ready for the adoption of Paragraph 3a? *Care of Low Income Groups—Consulting Service?* All in favor signify by saying "Aye"; opposed "No". It is adopted.

Secretary Crownhart: On Page 4, appears Paragraph 3b, *Care of Low Income Groups—By Other Than State or Component Society Plans.* "Your Committee recommends to the House that inasmuch as the legislature has enacted Chapter 350, Laws of 1935, the House adopt the following formal statement:

"The Society disapproves the inauguration or operation of any plan providing for the care of low income groups by practitioners not representing the State Society or a component County Medical Society in a manner approved by the State Society."

The Committee recommends the adoption of a very positive statement of policy. If you are to have plans at any time now or in the future, for the care of low income groups, the Committee believes very definitely they should be by component societies or by the state society but not by any individual group of members who seek to band themselves together for that purpose.

They recommend to you as the statement of policy of the Society the following:

"The Society disapproves the inauguration or operation of any plan provided for the care of low income groups by practitioners not representing the State Society or a component County Medical Society in a manner approved by the State Society."

Dr. Christofferson (Colby): What are you going to do with physicians in the county who are not members of the Society who will continue to violate that regulation?

Secretary Crownhart: The Society, at no time, has very good control of non-members. What the Society seeks to do is to keep in alignment its own membership, so as not to cause disruption in the Society.

The only control we have of non-members is when they step beyond the pale of the law; they probably would if they entered upon such a plan.

What the committee fears, if I interpret it correctly, and if not Dr. Fox will correct me, is this. We will say there is a component society where the majority of the members of the County Medical Society feel the low income groups within their territory are receiving adequate care on a fair basis so far as their ability to pay is concerned. But here is a small group of members within the Society who think some insurance plan is a fine idea, so they band themselves together and proceed to offer it to the employees of various concerns. The committee says that shall not occur within your membership.

Speaker Gundersen: Is there any discussion? If not, the question is on the adoption of Paragraph 3b, Page 4. All in favor of the adoption of this paragraph signify by saying "Aye"; opposed "No". The motion is carried.

Secretary Crownhart: On Page 4, there appears Paragraph 4. *Distribution of Medical Service.* "Recognizing that the Society, under Chapter 350 of the Laws of 1935, can best serve the public interests not only by concerted action but by continuous cooperative effort, your Committee recommends that the House amend the by-laws to prevent any member from conducting himself in a manner which tends to defeat or does defeat the public purposes for which the Society is organized and is operated.

"To accomplish this recommendation the Committee recommends the adoption of the following restatement and amendment to the By-Laws.

"Amend the first paragraph of Section 3, Chapter XI of the By-Laws so as to read as follows:

"Section 3. Each County Society shall judge of the qualifications of its members, subject to review and final decisions by the Council of the State Society. Every reputable and legally qualified physician who is a bona fide resident of the same county shall be eligible to membership so long as he does not practice nor profess to practice sectarian medicine, or engage in practice in a manner in conflict with the Principles of Ethics of the American Medical Association *or so conduct himself as to defeat or tend to defeat the purposes for which the Society is organized and is operating.*

Your Committee recognizes there must be some adequate means by which a County Medical Society can deal with those who seek to defeat or do defeat in purpose that which the County Society wishes to accomplish. Let me illustrate by saying that County Society wishes to enter into an agreement or con-

tract with the County Board of Supervisors of that county for the care of the indigent sick so as to maintain the principle of free choice of physician. While they are still seeking to arrive at an agreement between the two groups, a member of the Society goes to the County Board of Supervisors and says, "I shall do this work for half the amount for which the Society offers to do it."

Obviously any such action on the part of a single member not only tends to disrupt but does disrupt the very purpose and intent of the society of which he is a member and in which society he enjoys all privileges. Such action defeats in fact the purpose the legislature had in mind when it enacted Chapter 350. For that reason, the committee has recommended to you the adoption of the stated by-law. The question of whether it shall be put in force is a matter for each County Society to decide.

Dr. C. W. Henney (Portage): I would like to know how you are going to discipline a man like that. We have them throughout the state. I believe one of the worst type of offenders is that type of man who takes patients from other physicians and refers them to charity institutions, for instance, the state institutions. Some of the patients in the state institutions go on the five dollar basis and others enter the institution on strictly charity basis.

They steal patients, so to speak, from some other physician who is trying to uphold the ethics of the medical profession at home. We find in districts forty or fifty miles from the state hospital at Madison that is one of the problems with which we have to deal. I think there should be some means of disciplining some of our brothers who are trying to get under our skin.

Secretary Crownhart: I would say in framing this section, while the committee did not have it specifically in mind, it does empower the Society to expel any member who sets out deliberately to defeat the purposes for which that society is operated.

Speaker Gundersen: Is there any further discussion? If not the question is on Paragraph 4, Page 4. All in favor of adopting this paragraph signify by saying "Aye"; opposed "No". The motion is carried.

Secretary Crownhart: At this time, may we then adopt the amendment to the By-laws which has been introduced, laid on the table, properly in accordance with the provisions of the By-laws, the one contained in this section?

Dr. Cunningham: I so move.

. . . The motion was seconded by Dr. Pomainville of Wisconsin Rapids and carried . . .

Recess

Secretary Crownhart: Mr. Speaker, this brings us to the hour of eight-thirty. May I suggest we recess at this point and complete our action on the remainder of the report tomorrow morning at eight o'clock?

Dr. White: I move we recess until eight o'clock tomorrow morning.

. . . The motion was seconded by Dr. Doege of Marshfield and carried and the meeting recessed at eight-thirty p. m. . . .

Recess

THURSDAY MORNING SESSION

September 19, 1935

The recessed session of the House of Delegates was called to order at eight p. m. by the Speaker, Dr. Gundersen.

Speaker Gundersen: This is a recessed meeting of the session held last night, when we recessed until eight o'clock this morning.

The first order of business is the report of the Credentials Committee.

Dr. Christofferson: Mr. Speaker, the Credentials Committee reports at this time a registration of twenty-eight members of the House. No question has arisen regarding seating of delegates or alternates. Slips for that purpose have been passed around. I move the attendance so compiled constitute the roll of this session.

. . . The motion was seconded by Dr. Pomainville and carried . . .

Speaker Gundersen: We now come to Section 4a, Page 5, of the report of the Committee on Economics.

Secretary Crownhart: Continuing the procedure followed last night, the Secretary will read Section 4a and make a brief statement. We will then have any discussion which is desired on the part of the delegates.

Section 4a. *Distribution of Medical Service, Approval of Plans.* "Recognizing that the several component societies may wish to consider other plans for the distribution of medical services under the terms of Chapter 350 of the Laws of 1935, your Committee recommends that the House formally designate the Council of the Society with power to approve or disapprove, in the name of the Society, such plans under the law stated."

Authority does now exist under Chapter 350, in accordance with previous sessions of the House of Delegates of the American Medical Association, for any county medical society to devise any plan they may see fit in the matter of caring for low income groups.

As a matter of fact, however, under Chapter 350, there is a specification if any county society devises any such plan it shall operate only with the approval of the State Society. The question is who shall be the approving body in the event some society submits some plan. Your Committee on Medical Economics has here suggested that the House formally designate the Council as the body to whom such plans shall be submitted.

The idea is that the Council can be brought together rather quickly and you would not have to wait until a session of the House of Delegates in the interim between sessions. That is my understanding. If it is not correct, Dr. Fox will correct me.

Speaker Gundersen: What is your pleasure?

Dr. Toepfer (West Allis): I move the approval of Section 4a.

. . . The motion was seconded by Dr. S. M. B. Smith of Wausau and carried . . .

Secretary Crownhart: Mr. Speaker, we now come to Section 5, and I am inclined to believe it will be a section upon which the delegates will want to have the fullest information, because the Committee is presenting something to you for your most serious consideration. The section reads as follows:

5. *Distribution of Medical Services—Public Knowledge.* "While it has long been the self-imposed obligation of the profession of medicine to furnish medical service to all at a cost within their individual means to meet, as result of continuous propaganda over many years by those who seek to tear down the standards of scientific medicine, there is today prevalent among some of the laity the thought that the services of medicine are only to be secured at a fixed price.

"To the end that organized medicine may continue most effectively to discharge its obligation to the public and profession alike, your Committee submits herewith a proposed official announcement to be furnished to each member of the Society upon his own request. The Committee also submits a proposed credit form to accompany this announcement.

"The purpose of both largely will be evident upon their face and your Committee reserves for floor discussion statements to amplify in full detail this suggestion." (end of Section 5)

The Committee is of the opinion, Mr. Speaker, that over a period of years the continuous propaganda of those seeking to forward in this country a system of compulsory sickness insurance or compulsory government service in one manner or another has made some considerable headway both due to the fact we are in a depression period and due to the fact moreover that they have been using the argument that medicine is only to be secured at a fixed price and if people did not have this minimum fixed price available they had to go without the services of medicine.

The President's Committee on Economic Security employed a Mr. Edgar Sydenstricker of the Milbank Fund. He was actually the director of all the survey of medicine made under the President's Committee on Economic Security. It was under his influence that various physicians, representing largely his viewpoint, were selected to assist in formulating their study and reports. After Mr. Sydenstricker's report was submitted to the President and in an address before the American Academy of Political Science this last spring, he started an address by saying, "If we grant that medical care is a necessity of life and of national well being, and if we are aware of the fact that a large proportion of the population is deprived of this necessity . . . ." That is a very significant statement.

Your Committee has the conviction that the real foundation for all the argumentation of the propagandists rests upon that second presumption of his "If we are aware of the fact that a considerable proportion of the population is deprived of this necessity."

Your Committee is perfectly familiar with the fact, for instance, that during the course of the present school year some 150 high schools in Wisconsin which belong to the Debate League will debate the subject of some form of medical service for all the people at public expense. I think we are cognizant of the fact that many of the high schools of the state which do not belong to the Debate League will still debate the same question.

Insofar as Congress is concerned, the Committee has reason to believe at the session that convenes in January this may not be any real subject matter, but they have no information to indicate it may not be a very serious matter for consideration in 1937. It is for that reason that on Page 5, under Section 5, the Committee makes the statement: "While it has long been the self-imposed obligation of the profession of medicine to furnish medical service to all at a cost within their individual means to meet, as a result of continuous propaganda over many years by those who seek to tear down the standards of scientific medicine, there is today prevalent among some of the laity the thought that the services of medicine are only to be secured at a fixed price." (The section was re-read in full).

Not speaking for the Committee, but speaking for myself as Secretary, I would like to point out with emphasis that, insofar as I know the feeling of the Committee, they do not submit this proposed form to you as any cure of the entire matter. They are submitting it to you for your most careful consideration as a means of bringing vividly to the attention of the people in Wisconsin the fact that no one need go without medical service. And, if they have any reluctance to ask for it because they may feel they have not the funds with which to purchase it, this announcement may overcome that reluctance.

At the same time, it furnishes a means for the physician to ascertain from that particular patient what his current status is, his income for the last twelve months, his dependents. He gets a pretty fair financial picture of just what that patient can and cannot do.

Whether it is in the interest of medicine to have such a card and such a credit blank for the purpose that has been stated, merely a re-statement of something that has always been true in medicine, is very strictly for this House to determine.

Speaker Gundersen: What is your pleasure in regard to this section? Do I hear a motion to adopt it?

Dr. Fidler (Milwaukee): Mr. Speaker, I most heartily move the adoption of Section 5.

. . . The motion was seconded by Dr. Murphy of Milwaukee . . .

Dr. Fox: I would rather the discussion would come from other members of the Society, but it seems to me we cannot dodge this issue. Just how

the issue should be taken up, of course, is a question. There is going to be some time, and perhaps in the near future, removal of federal aid to indigents, as far as money is concerned. If that large group who are now indigents go on and must employ their own physician and pay for it themselves, in my community the practice of five doctors would be thrown out. If we have some sort of set-up to take care of this thing, it is going to swamp those people.

Those of us old enough and fortunate enough to have an established practice, with perhaps a good percentage not on the indigent list, may think we are secure, but those five doctors are going to get some business. Whether we put up some formulative plan where can take care of this low income group at a reduced fee, those men are going out and if our fee calls for three dollars, they will call for two dollars. They may find that doctor is better than I am and we get into unfortunate competition among ourselves.

I think this is rather a dignified way. We are all together and we can step down and still step back. As to this credit slip, we know that some may come in and tell a falsehood about their credit. We can, in a community large enough, have a bureau to investigate those things. When a man or his family become ill, he can be investigated and see what his circumstances are. If we all work together on that basis, I do not think any hardship will come from so-called reducing of fees.

Dr. Gramling: I really believe this ranks among the greatest reports any committee has presented to the State Medical Society of Wisconsin. I envy the men whose names are attached to the report because it places the medical profession in the light we would like to have it, in the best light possible before all the people.

When we think of what our enemies try to do and say about us, which we know is not true, this report clarifies it. I am one of those who really believe in the statement this committee has so well made here "While it has long been the self-imposed obligation of the profession of medicine to furnish medical service to all at a cost within their individual means to meet."

I believe that has been an ideal toward which the medical men of this country have been striving. It is an ideal that is worthy of our great profession. There is no question, gentlemen, when a man nowadays gets the title of doctor he immediately, with that title, secures a prestige. That prestige is handed down to us by countless numbers who are passed and gone. But the very fact that they held to such high ideals which had their beginning two thousand years ago and are still operating must convince one there is some inherent truth in it. That it immediately makes the doctor stand out and be respected and he can only continue to be so as he follows these ideals and as we love to see it continue for countless generations to the end of time in the future.

The report as submitted by this committee is, I believe, in the light where we would like to see it.

Dr. H. B. Keland (Racine): The question which arises in my mind is how to classify those who are on the borderline between those low income groups and those who are self-supporting and always have been. They may have their homes and a small income and yet it is as much of a hardship to them as those who have an income without a home. I question how to meet that situation if you lower the rates of your services to those in that low income group, how you can overcome the difficulty of those who own their homes and have an income and yet are hard pressed to pay those expenses.

Dr. H. T. Barnes (Delafield): Would it not be a good thing to have that material available for these high school debaters?

Secretary Crownhart: We are preparing a very careful debate outline with the assistance of a high school debate coach. We find there is a countless amount of references for high school students, all referring to the affirmative of the question and almost nothing referring to the position of the physician practicing medicine. We are preparing such an outline and hope to have it ready for distribution in about two weeks.

The question has been asked the Secretary as to the reference on the credit blank to a section in the statutes. You will recall that the credit blank itself (at the foot) provides that the individual signs the statement; "I certify in accordance with Section 343.41 of the Wisconsin statutes, that the above financial statement given for the purpose of securing credit adjustment is a true and accurate one."

Section 343.41 of the Wisconsin Statutes refers to false statements and a penalty and says: "Any person who shall directly or indirectly, designedly make or cause to be made any false signed statement in writing in reference to assets or liabilities or both or assets or liabilities of any firm or corporation of which he may be a member, stockholder or employe, whether made to a mercantile agency or otherwise, for the purpose of securing fidelity or surety bond or procuring credit in any form, or for the purpose of procuring any extension of credit already given, provided such statement is relied upon and actual financial loss thereby sustained by the person, firm, or corporation so relying upon such statement shall be punished by imprisonment," and so forth.

For my own information, I would like to ask this question in regard to Dr. Keland's discussion, so that I may have it clear in my mind. Dr. Keland, do you understand, in the use of this blank, there would be no fee schedule as such? Each physician, upon the basis of the information he obtained, would arrange for the service in any way he saw fit and any financial arrangement he saw fit.

Presumably it would fall within the individual's ability to pay over some period of time. Presumably, as I understand, it would be a post service budgeting arrangement that the physician would

work out with his patient. Is that your understanding, Dr. Keland?

Dr. Keland: Yes.

Dr. Christofferson: I would like to make a statement in regard to the handling of the low income group. I do not see why a man could not render a bill for services the same as any other group, with the understanding he would collect what he could. That is all you are doing now, no matter how you take care of it. I cannot see anything wrong in that system of doing business. As a matter of fact, when I first started to practice medicine, we would render a bill and would then sometimes take it out in chicken and potatoes.

Dr. Rector: In reference to the matter our Secretary read pertaining to the law, I have heard it expressed throughout these halls at different times that the trouble would be in putting this into force; that the physician who had the blank filled out would be afraid to enforce the matter. The physician who has the blank does not need to enforce the matter.

In our county, we have a Public Relations Committee and all matters of that type are handled through our Public Relations Committee. The individual would not have to appear in prosecuting a case of that type. He would not have to be in the foreground. The County Society can do it, and your County Society is a ruling body in your county, regardless of their being a small percentage of the people. It is not always the majority that rule in thought, and it is just the type of presentation that your Society makes to the public on matters of that type that gives your protection. If you set up your Public Relations Committee and one or two offenses occur in regard to this, letting your Public Relations Committee handle one or two cases, I think your false statements and other difficulties will be greatly in the minority, and you will have a better understanding of your people. You will also have become credit conscious yourself.

I regret some of the statements that have gone into the press as the result of remarks in this meeting on some of the resolutions presented, for example, in connection with the resolution I presented on the care of public school athletes. That was not a matter of financial return to the profession. It was a matter of educating the public as to their own responsibility, and when we educate the public to their own responsibility we educate the individual.

It is true we have to block up leaks in the profession. Their statements may be true but as read by the public it sounds differently. In connection with what appeared in the paper this morning, it looks as though this is completely a financial program with the profession. We will admit in a way that it is, but it is all for the public good. All of you have x-rays and findings that come from the technicians, but the final report is left to you. As for myself I do not feel competent to do that. I feel my x-ray man must be a consultant in the case and must take his share of the responsibility. So I do not look upon those things as a matter of financial return to the profession alone.

It is a matter of greater public good, and in our talks and expressions to the public we should assure the public and show them these moves are a matter of public good. With our Secretary, I feel we need to re-state to all people and especially our politicians that medical service is available for all people. I wish to express my approval of the adoption of this section at this time in its entirety. One word further to all county medical organizations that seek to put this into force. Let us have our fullest advice from our Council and from our State Society officers that every angle of our proposition may be studied and understood by our individual members before we talk out of turn.

Dr. Sisk (Madison): Mr. Speaker, this proposed credit form, of course, is only a matter of suggestion and is not to be put in as a part of the machinery?

Secretary Crownhart: Unless the individual wishes to adopt it.

Dr. Sisk: I think most of us, for a very good reason, are afraid of placing plans into effect that become official. I do not know of any scheme whatsoever that carries the implication of insurance in one way or another to take care of any group, borderline or other case, that does not have dangers. I think that hospitalization insurance has a tremendous danger in that the public will hold it up to the medical profession even if it does work out well for the hospitals, "Look, doctors, what this thing is doing for the hospital and the public." The first moment the hospitals have that proposition successfully worked out in the community the public pressure will be put on the doctors.

I do not oppose, as such, hospital insurance or prepayment schemes for hospitalization. It might work out all right for the hospitals, but I do not want to have anything to do with it and I do not like to see the hospitals promulgate it and flout it upon the community, because it thereby becomes a hammer by which the public chisels services of one kind or another for the people who do not deserve that type of consideration.

The thing we are going to be up against more than any other in our community of 115,000 people is not service to the people for medical care. It is service for hospitalization. We do not need to provide medical facilities for care for the indigent and borderline groups, so-called. We have the facilities, both medical and hospital, but how are we going to provide facilities for these people for hospitalization.

Under the recent developments of the care for the indigent, the man who goes on work relief in the new program has his case record closed. The poor relief authorities, in my county, have adopted the distinct policy that when a case record is closed that man is off relief and then is no further a responsibility of this poor relief division. That is the printed public policy.

I quite agree with the poor relief authorities this is perhaps a very sane change from the left to the center. It is an effort to get these people back on an individual basis of support. Fifty-two dollars a month is all that is earned in my community on this new program. It is absurd to think that is going to take care of any substantial necessities other than bare subsistence and I dare say hardly that.

Why is it necessary to develop in any community a cumbersome bit of machinery with all of the devices for determining this class with an income of so much shall pay so much and that class so much. I think it is the most dangerous thing the medical profession can get into.

We have heard for the first time, in my knowledge, a suggestion that it is probably advisable to establish a bureau for social work, social service. The first time we crack this proposition open in Dane County, a great group of our men are going to say, "Yes, you have sold out to the social workers and you are going to make socialized medicine out of it." There is a large group of people in our profession, in our county society who come regularly and help work out the plans who hate the word "social".

I think the doctor who has been doing social work for a long time is a better one than the average one employed on poor relief. If the State Society is going to endorse a scheme for social work done by the doctor, then I think such a plan, if you please to call it, can be three parts. Have each individual case considered by this social service bureau if you desire to have one, and treat each case on its individual merits; try to work out some scheme with the hospitals.

I think the doctors are going to have to go to the hospitals and say, "We are going to have to work this out. Will you play ball with us?" Will the hospitals play ball or are they going to force us into a social scheme for prepayment for hospital care. I think that is a dangerous thing we have to watch, particularly in the community where social agencies are now putting on the pressure.

Already, before our society in Dane County, we have had petitions from the branch of the American Federation of Labor asking, "Will you send a committee to us to work out some sort of scheme for the care of the low earning groups in our membership?" They are asking us now to consider their complete organization in providing some sort of scheme to take care of it.

We have been stalling that thing for three months. We wanted to come to this House of Delegates and find what this thing is all about before we went back and talked to that labor temple crowd. What are we going to do? Are we going to establish in our society a social service agency? Are we going to get the backing of the State Medical Society in dealing with poor relief, the borderline cases that ought to be on poor relief for their hospital bill? Can we apply the pressure and put these people under the statute for their hospitalization and still go ahead and make arrangement for these people for their medical care?

Has the medical man the power to force the poor relief authorities to pick up their responsibilities? I have understood from some of the delegates here to whom I have talked that practically it is impossible to get medical care taken care of in some of these counties, FERA to the contrary notwithstanding, and that as for paying the bill in the hospital and for surgery it is a thing unheard of, even though there is a federal scheme.

I am wondering what is going to happen when federal aid is withdrawn and the local county funds are going to pay for all of this poor relief in connection with these families which receive fifty-two dollars in some communities and forty dollars in others. The case record is closed.

My county gave me this answer. "We are going to wait to see what the nearby counties do in this thing and are going to do as they do. No county should act alone. The county poor relief authorities should all stick together and do the same thing."

That is going to put it right up to the medical men because they are going to have the counties going back to the horse and buggy days where they have the poor relief doctor. I think particularly in this form of poor relief it should be worked out in the councilor districts. Let us work those things out in those districts, particularly in connection with hospitalization. We have been experimenting in about twenty-five or thirty cases where we worked out a payment scheme for doctor and hospital. To be sure it is not a full fee for any person but it is more than the county has been paying and we have been having a great deal of success working out an arrangement whereby they lay the money on the barrel head and it is more than those people ever paid for medical care before. They pay something but not a full fee.

Dr. Vander Kamp (Tomah): I think the big thing is one line in the committee's report pertaining to the fact that if we make an announcement we are willing to take care of these people we take the props away from the opposition. But the question on the part of the doctors is how we are going to take care of these people.

My community may be somewhat different from others. The best way to describe it is an actual case I had. The poor relief official came in with a Colles' fracture. The usual price for such fracture is twenty-five dollars. I said to him, "It does not make any difference to me whether you pay twenty-five dollars or thirty-one dollars, twenty per cent of it will be hard to collect. If I distribute it twenty per cent over the eighty per cent, I am not out. If I charge thirty-one or thirty-one dollars and a half, you are naturally taking care of the other percent, where if you pay me twenty-five I will have to get this other six from somebody else. If the county wants to pay for the other twenty per cent, that is fine, your bill is going to be that much less." It probably

would be the only time he would have a Colles' fracture and he was in favor of having the bill of twenty-five dollars and having the other bill of twenty per cent spread over the county. If you are going to meet your overhead, your collections should be pretty well up to one hundred. What are you going to do with the low income group that is not going to pay.

I can find out what the income of my clientele is without any difficulty, but the whole thing is: Should our county pay for this low income group for which we are going to hold the sack if we are not getting paid for it?

Dr. Rector: Mr. Speaker, may I add one more word? You will recall last night on this floor our committee called attention to the social service and we objected to it. We believe the set-up with the credit bureau is all right. That is a business bureau not run by social workers, and we cautioned all county societies to shy away from the social service talk and to have in its place this business bureau if they are going into this work.

Secretary Crownhart: I hope no delegate will refrain from expressing himself on this Paragraph 5.

Speaker Gundersen: Are you ready for the question? The question is then whether this House of Delegates wishes to approve the three paragraphs which appear on Page 5. Are you ready for the question? All in favor of the adoption of this paragraph signify by saying "Aye"; opposed "No". It is unanimous.

Secretary Crownhart: The question then is on the adoption of the report of the Reference Committee of the House on the report of the Committee on Medical Economics. That report was presented by Dr. Rector last night and is now before you for adoption.

Dr. Rector: I move the adoption of the report.

. . . The motion was seconded by Dr. Sprague of Madison and carried . . .

Secretary Crownhart: Mr. Speaker, may we now arise from executive session?

Dr. Rector: I have not quite finished the report of the Committee. It will take a minute or two. In addition to the supplementary report discussed in some detail, your Committee recommends the adoption of the report on Medical Economics as printed in the State Medical Journal. We wish to again express the deep appreciation to the House of Delegates and members of the Society for the tremendous amount of service rendered and effort expended by this committee to bring to the members of this Society the available material which has been assigned to this committee. We move the adoption of the original report.

. . . The motion was seconded by Dr. Sprague and carried . . .

Dr. Rector: To the House of Delegates and our Speaker, your Committee wishes to express its appreciation for the privilege of having served you in this capacity. To Mr. George Crownhart, and his office, we are again grateful for the kindly assistance in supplying the extra data and desired information on many problems, and to my Committee may I express appreciation of their services.

Speaker Gundersen: A motion is in order that we rise from executive session.

Dr. Vander Kamp (Tomah): I so move, Mr. Speaker.

. . . The motion was seconded by Dr. Gramling and carried . . .

Speaker Gundersen: A motion is in order to adjourn the second session of the House of Delegates, whereupon we will immediately convene for the third session constituting the election of officers.

Dr. Adams (Kenosha): I move we adjourn.

. . . The motion was seconded by Dr. Sisk and carried and the second session adjourned at nine-forty-five a. m. . . .

Adjournment

THURSDAY MORNING SESSION

September 19, 1935

The third session of the House of Delegates was called to order immediately following adjournment of the recessed session at nine forty-five a. m., by the Speaker, Dr. Gundersen.

Speaker Gundersen: The third session of the House of Delegates will please be in order.

We will have the report of the Committee on Credentials.

Dr. Christofferson: Mr. Speaker, your Committee on Credentials is pleased to report at this time the registration of forty-four members of the House, including three Councilors. No question has arisen relative to the seating of delegates. Slips for the purpose having been passed out, I move the attendance records so compiled constitute the roll of this session.

. . . The motion was seconded by Dr. Pomainville of Wisconsin Rapids and carried . . .

Speaker Gundersen: We will next have the report of the Committee on Nominations, Dr. Redelings, Chairman.

Elections

Dr. Redelings: Mr. Speaker, I am very pleased to present the report of the Nominating Committee. It was a real pleasure to sit in this committee during its deliberations. They were harmonious and unanimous, giving careful consideration to each nomination. We hope you will approve the nominees whom we shall submit for your consideration.

For President-Elect, we choose to name a man who needs no introduction to this House. He has been a worker in the State Society for many years, also in his component society. In recent years, he was elected a Councilor of the Society. He took his election seriously and assumed his office in a manner which has made him an outstanding Councilor. His splendid activity, his dynamic lead-

ership made him felt throughout his entire district and I think the entire state.

I wish I had words to express the feeling I have in regard to this nomination. If this House approves the nomination, I am convinced in my mind he will accept the responsibility of the presidency in the same serious mind that he accepted his responsibility as a Councilor and that he will become a dynamic, forceful, and judicious leader of the State Society. He has a delightful personality, loved by all who know him.

It gives me great pleasure at this time to submit the name of Stephen E. Gavin of Fond du Lac as the unanimous choice of your Nominating Committee for the office of President-Elect.

For Speaker of the House of Delegates, after careful deliberation, your Nominating Committee chose to re-nominate the present Speaker, recognizing his worth and his potentialities for additional future service. I am pleased, on behalf of the Nominating Committee, to present the name of Gunnar Gundersen as Speaker of the House of Delegates for the ensuing year.

For Vice-Speaker of the House your Nominating Committee presents the name of James C. Sargent to succeed himself.

Both these young men are valuable members of our Society and have great potentialities for future service to this body.

In nominating the delegate to the American Medical Association, the committee developed quite a bit of discussion and serious consideration. I am pleased to say to you that the committee re-nominated Dr. Joseph F. Smith of Wausau to succeed himself. The Committee recognized that Dr. Smith has given invaluable service over many years to the State Medical Society, as Councilor, as organizer of the department of physical therapy, and as delegate to the American Medical Association.

We feel that his rich experience in his service to the Society and his great familiarity with the detail of the work both of the Society and the state and his contact with the American Medical Association as a delegate in the House of Delegates especially fit him to succeed himself. Therefore, I am pleased to submit the name of Joseph F. Smith to succeed himself.

As alternate to the American Medical Association, by unanimous choice, your committee chose Charles W. Giesen of Superior. Dr. Giesen is unknown to me personally, but I see in him great possibilities for service to the state, and I seriously hope, if you choose to elect him, he will take his obligation seriously and prepare to become a worthy successor to our present delegate in the event it is necessary to do so.

When it came to the selection of a place for next meeting, your Committee unanimously chose Madison, first because of its splendid hotel accommodations and its admirable accommodations for our meeting; second, because of the gracious hospitality of the medical profession of Madison in its cooperation with the state officers, in an effort to make the Madison meeting a great success.

Signed by the Nominating Committee,

1st Dist. H. A. Peters,
2nd Dist. H. B. Keland,
3rd Dist. J. Newton Sisk,
4th Dist. Wilson Cunningham,
5th Dist. A. C. Radloff,
6th Dist. D. J. Twohig,
7th Dist. N. P. Anderson,
8th Dist. T. J. Redelings,
9th Dist. H. H. Christofferson,
10th Dist. W. C. Henske,
11th Dist. Charles W. Giesen,
12th Dist. Henry J. Gramling,
13th Dist. W. S. Bump.

Speaker Gundersen: The House will proceed to the election of a President-Elect. May I call your attention to the fact that although the Nominating Committee has brought in one nomination it does not preclude nominations from the floor, at this time.

Are there any further nominations for the office of President-Elect? . . . . . If not, I shall entertain a motion that the nominations be closed and the Secretary cast the ballot for Stephen E. Gavin of Fond du Lac as President-Elect of this Society.

Dr. Fox: I so move.

. . . The motion was seconded by Dr. Marsh of Madison and carried unanimously.

Secretary Crownhart: The Secretary takes great pleasure in casting the unanimous vote of this House for Dr. Stephen E. Gavin of Fond du Lac as President-Elect.

. . . Vice-Speaker Sargent in the chair . . .

Chairman Sargent: The Nominating Committee has nominated Dr. Gunnar Gundersen as Speaker of the House of Delegates for the ensuing year. Are there any further nominations?

Dr. Butler (Menomonie): I move the nominations be closed, the rules be suspended and Dr. Gundersen be elected by acclamation; that the Secretary cast one ballot for Dr. Gundersen.

. . . The motion was seconded by Dr. Sisk and carried . . .

Secretary Crownhart: Mr. Speaker, the Secretary takes real pleasure in casting the unanimous ballot of this House for Dr. Gunnar Gundersen as Speaker of the House of Delegates.

Speaker Gundersen: The next order of business is the election of a Vice-Speaker of the House. The Nominating Committee has placed in nomination the name of Dr. James C. Sargent. Are there any further nominations?

Dr. McMahon (Glenwood City): I move the nominations be closed and the Secretary be authorized to cast the ballot for Dr. Sargent.

. . . The motion was seconded by Dr. Toepfer of West Allis and carried . . .

Secretary Crownhart: Mr. Speaker, the Secretary takes real pleasure in casting the unanimous ballot of this House for Dr. James C. Sargent to succeed himself as Vice-Speaker.

Speaker Gundersen: The Nominating Committee has presented the name of Dr. Joseph F. Smith of Wausau as delegate to the American Medical Association.

Dr. Murphy: I move the nominations be closed, the rules be suspended, and the Secretary be authorized to cast the ballot of this House for Dr. Joseph Smith.

. . . The motion was seconded by Dr. Lettenberger of Milwaukee and carried . . .

Secretary Crownhart: Your Secretary takes pleasure in casting the unanimous ballot of this House for Dr. Joseph F. Smith of Wausau to succeed himself as delegate to the American Medical Association for this Society for a term of two years.

Speaker Gundersen: The next order of business is the election of an alternate to the American Medical Association. The Committee has nominated Dr. Charles W. Giesen of Superior. Are there any further nominations? If not, what is your pleasure?

Dr. Rector: I move the suspension of the rules and that the Secretary be authorized to cast the ballot for Dr. Giesen.

. . . The motion was seconded by Dr. White of Rice Lake and carried . . .

Secretary Crownhart: Mr. Speaker, the Secretary takes pleasure in casting the unanimous ballot of this House for Dr. Charles W. Giesen of Superior as alternate delegate to the American Medical Association for a term of two years.

Speaker Gundersen: The next order of business is the place of meeting for the 1936 Anniversary Meeting of the State Medical Society of Wisconsin. Madison, Wisconsin, has been chosen as the place of meeting by the Nominating Committee. Are there any other selections of meeting place on the part of the delegates?

Dr. Peterson: I move, Mr. Speaker, that Madison be designated as the meeting place for the next anniversary meeting of the State Medical Society of Wisconsin.

. . . The motion was seconded by Dr. Sisk of Madison and carried . . .

Speaker Gundersen: Is there any further business to come before this Society? Mr. Secretary, have you any further business which should be transacted by this House?

Secretary Crownhart: Mr. Speaker, I have no further announcements to make with this one exception. The House has transacted a tremendous amount of business at this session. I want to impress upon the delegates that it has come to the attention of the Secretary that your Committee on Resolutions, your Committee on Reports of Standing Committees, and the Committee on Reports of Officers were in session from three to eight hours each. It has come within the knowledge of your Secretary as well that the various members of these committees have not seen the Auditorium as yet. Certainly this is a splendid service rendered to the members of this House.

Just as soon as possible, after the sessions have been concluded, the Secretary will prepare and send to each delegate and each alternate a mimeographed statement as to the material business transacted by this House. We will attempt to get that out within a period of ten days that you may have it in your hands in making reports to your component societies. There is no other business before the Secretary.

Speaker Gundersen: The Chair will appoint Dr. Carter, Dr. Redelings, and Dr. Gramling to escort President-Elect Gavin to the platform.

. . . A recess was declared awaiting the arrival of Dr. Gavin . . .

Speaker Gundersen: Those who have been seeking Dr. Gavin were unable to find him. Apparently he has already gone to attend the meetings at the Auditorium.

(Due to the fact that Dr. Gavin could not be located in the present session, he was later presented as the newly elected President-Elect at the general session held in the Auditorium on Thursday afternoon)

Dr. Adams (Kenosha): I move we now adjourn sine die.

. . . The motion was seconded by Dr. Cunningham and carried and the session adjourned sine die at ten a. m. . . .

Adjournment

Attendance House of Delegates, Milwaukee, 1935

Society	*Delegate*	1	2	3
Ashland–B–1	C. J. Smiles, Ashland	a	a	a
	R. O. Grigsby, Ashland*	x	a	a
Barron–W–S–B	A. S. White, Rice Lake	x	x	x
	H. H. Schlomovitz, Barron*	a	a	a
Brown–K–D	P. R. Minahan, Green Bay	x	x	x
	W. M. Wochos, Kewaunee*	x	x	a
Calumet	J. W. Goggins, Chilton	a	a	a
	N. J. Knauf, Chilton*	a	a	a
Chippewa	W. C. Henske, Chippewa Falls	x	x	x
	C. T. Clauson, Bloomer*	a	a	a
Clark	H. H. Christofferson, Colby	x	x	x
	M. C. Rosekrans, Neillsville*	a	a	a
Columbia	C. W. Henney, Portage	x	x	x
	H. M. Caldwell, Columbus*	a	a	a

Society	Delegate	1	2	3	
Crawford	J. M. Sullivan, Prairie du Chien	x	x	a	
	E. T. Ackerman, Gays Mills*	a	a	a	
Dane	H. E. Marsh, Madison	x	x	x	
	W. T. Lindsay, Madison*	x	x	a	
	E. F. Schneiders, Madison	a	a	a	
	L. V. Sprague, Madison*	x	x	x	
	L. W. Peterson, Sun Prairie	x	x	x	
	Louis Fauerbach, Madison*	a	a	a	
	J. Newton Sisk, Madison	x	x	x	
	M. J. J. Coluccy, Madison*	a	a	a	
Dodge	A. W. Hammond, Beaver Dam	a	a	a	
	R. R. Roberts, Beaver Dam*	a	a	a	
Douglas	C. W. Giesen, Superior	x	x	x	
	C. H. Christiansen, Superior*	x	a	a	
Eau Claire–D-P	F. E. Butler, Menomonie	x	a	x	
	R. N. Leasum, Osseo*	a	a	a	
Fond du Lac	D. J. Twohig, Fond du Lac	x	x	x	
	C. W. Leonard, Fond du Lac*	a	a	a	
Forest	E. G. Ovitz, Laona	x	x	x	
	G. W. Ison, Crandon*	a	a	a	
Grant	E. C. Howell, Fennimore	a	a	a	
	J. E. Donnell, Cuba City*	a	a	a	
Green	J. F. Mauermann, Monroe	x	x	x	
	W. G. Bear, Monroe*	a	a	a	
Green Lake–W-A	A. J. Wiesender, Berlin	x	x	a	
	G. E. Baldwin, Green Lake*	a	a	a	
Iowa	M. T. Erickson, Highland	a	a	a	
	H. M. Walker, Dodgeville*	a	a	a	
Jefferson	H. P. Bowen, Watertown	x	a	a	
	W. S. Waite, Watertown*	a	x	a	
Juneau	Brand Starnes, New Lisbon	a	a	a	
	Carl C. Vogel, Elroy*	a	a	a	
Kenosha	A. F. Ruffolo, Kenosha	x	x	x	
	G. F. Adams, Kenosha*	x	x	x	
La Crosse	N. P. Anderson, La Crosse	x	x	a	
	G. Gundersen, La Crosse*	x	x	x	
Lafayette	W. B. Williams, Argyle	a	a	a	
	R. B. Quinn, Darlington*	a	a	a	
Langlade	J. C. Wright, Antigo	x	a	a	
	L. A. Steffen, Antigo*	x	a	a	
Lincoln	H. G. Hinckley, Merrill	a	a	a	
	E. J. Henderson, Tomahawk*	x	x	x	
Manitowoc	R. W. Hammond, Manitowoc	x	x	a	
	L. W. Gregory, Manitowoc*	a	a	a	(1)
Marathon	S. M. B. Smith, Wausau	x	x	x	
	E. E. Flemming, Wausau*	a	a	a	
Marinette–Florence	T. J. Redelings, Marinette	x	x	x	
	J. V. May, Marinette*	x	a	a	
Milwaukee	Millard Tufts, Milwaukee	x	x	x	
	W. A. Ryan, Milwaukee*	x	x	x	
	N. E. McBeath, Milwaukee	x	x	a	
	S. M. Markson, Milwaukee*	x	x	x	
	L. W. Hipke, Milwaukee	x	x	x	
	E. H. Gramling, Milwaukee*	x	x	x	
	Charles Fidler, Milwaukee	x	x	x	
	E. O. Gertenbach, Milwaukee*	x	x	x	
	R. A. Toepfer, West Allis	x	x	x	
	W. F. Grotjan, Milwaukee*	x	a	x	
	U. A. Schlueter, Milwaukee	x	x	x	
	P. E. Oberbreckling, Milwaukee*	x	x	a	
	W. M. Jermain, Milwaukee	x	x	x	
	T. S. O'Malley, Milwaukee*	a	a	a	
	Jos. Lettenberger, Milwaukee	x	x	x	
	F. E. Drew, Milwaukee*	x	x	x	
	F. D. Murphy, Milwaukee	x	x	x	
	W. V. Nelson, Milwaukee*	a	a	a	
	J. C. Sargent, Milwaukee	x	x	x	
	R. E. Fitzgerald, Milwaukee*	x	a	a	
	H. W. Powers, Milwaukee	x	x	x	
	H. C. Schumm, Milwaukee*	x	x	x	
	H. J. Gramling, Milwaukee	x	x	x	
	A. R. Langjahr, Milwaukee*	x	x	a	
	G. W. Neilsen, Milwaukee	x	x	x	
	Edward Jackson, Milwaukee*	x	x	x	

Society	Delegate	1	2	3
Monroe	H. Vander Kamp, Tomah	x	x	x
	C. H. Cremer, Cashton*	a	a	a
Oconto	G. W. Krahn, Oconto Falls	x	x	a
	J. S. Dougherty, Suring*	a	a	a
Oneida–Vilas	W. S. Bump, Rhinelander	x	x	x
	O. R. McMurry, Eagle River*	a	a	a
Outagamie	A. E. Rector, Appleton	x	x	x
	Albert B. Leigh, Kaukauna*	x	x	x
Pierce–St. Croix	A. E. McMahon, Glenwood City	x	x	x
	O. H. Epley, New Richmond*	a	a	a
Polk	R. G. Arveson, Frederic	x	x	x
	A. N. Nelson, Clear Lake*	a	a	a
Portage	E. E. Kidder, Stevens Point	x	x	x
	F. A. Marrs, Stevens Point*	a	a	a
Price–Taylor	J. D. Leahy, Park Falls	x	a	a
	E. B. Elvis, Medford*	a	a	a
Racine	H. B. Keland, Racine	x	x	x
	T. C. Hemmingsen, Racine*	x	a	a
Richland	B. I. Pippin, Richland Center	a	x	x
	George Parke, Viola*	a	a	a
Rock	P. A. Fox, Beloit	x	x	x
	W. J. Allen, Beloit*	x	x	x
Rusk	W. F. O'Connor, Ladysmith	x	x	x
	J. C. Baker, Hawkins*	a	a	a
Sauk	Edward McGrath, Baraboo	a	a	a
	H. J. Irwin, Baraboo*	x	x	x
Shawano	A. J. Gates, Tigerton	x	x	x
	L. W. Peterson, Shawano*	a	a	a
Sheboygan	A. C. Radloff, Plymouth	x	x	a
	A. J. Knauf, Sheboygan*	a	a	a
Trempealeau–J–B	J. Paul Reinhardt, Fountain City	x	x	x
	R. L. MacCornack, Whitehall*	x	x	x
Vernon	A. L. Myrick, De Soto	x	x	x
	P. H. Hansberry, Hillsboro*	a	a	a
Walworth	S. G. Meany, East Troy	x	a	x
	H. J. Kenney, Delavan*	a	a	a
Washington–Ozaukee	J. G. Hoffmann, Hartford	x	x	x
	H. M. Lynch, West Bend*	x	x	a
Waukesha	H. A. Peters, Oconomowoc	x	a	a
	H. T. Barnes, Delafield*	x	x	x
Waupaca	J. W. Monsted, New London	a	a	a
	Sam Salen, Waupaca*	a	a	a
Winnebago	R. B. Rogers, Neenah	x	x	a
	M. N. Pitz, Neenah*	a	a	x
Wood	F. X. Pomainville, Wisconsin Rapids	x	x	x
	K. H. Doege, Marshfield*	x	x	a

x—Present.
a—Absent.
*—Alternate.
(1)—In Europe.

Proceedings of the Council

FIRST MEETING OF COUNCIL

English Room, Schroeder Hotel, September 17, 1935

1. **Roll Call.** The Council was called to order, following a luncheon meeting, at 1:30 P. M. Tuesday, September 17, 1935, by the Chairman, Dr. Arthur W. Rogers of Oconomowoc. The roll call disclosed the following present: Councilors Pope, Duer, Johnson, Gavin, Gleason, Rogers, Smith, Cunningham, Blumenthal and Stang; President O'Leary; President-Elect Carter; Drs. Paul Fox, Beloit, and R. G. Arveson, Frederic, of the Committee on Medical Economics; Speaker Gunnar Gundersen; Treasurer Sleyster; Dean Middleton and Dr. Bleckwenn, of the University; former Councilor John M. Dodd, Ashland; President Coventry and Secretary Meyerding of the Minnesota State Medical Association; Mr. J. G. Crownhart, Secretary; Mr. George Larson, Assistant.

2. **Approval of Minutes.** Moved by Gavin–Johnson that the minutes of the last meeting of the Council as published in the Wisconsin Medical Journal for February, 1935, be approved. Carried.

3. **Goiter Committee.** For the records the Chairman announced that in accordance with Council action he has appointed as a special Committee of the Council on Goiter for the term ending January, 1936, the following members of the Society: Drs. Arnold S. Jackson, Madison, Chairman; M. O. Boudry, Fond du Lac, and Francis D. Murphy, Milwaukee.

4. **Confirmation of Mail Ballots.** The Secretary reported the following affirmative mail ballots of the Council:

(a) Decision to acknowledge receipt of a letter from the Outagamie County Medical Society referring to the instruction of delegates at the special session of the House of Delegates; sending a copy to Wisconsin's delegates to the American Medical Association, but other than advising that the letter represents the probable group opinion of this state, delegates not to be formally instructed.

(b) Decision of the Council as to the policy of the Society concerning two measures pending in the legislature each calling for the creation of an interim committee to study the costs of medical care.

(c) Approval of the appointment of a Goiter Committee by the Chairman of the Council.

(d) Approval of legislative recommendations of the Committee on Mental Hygiene.

(e) Decision of the Council with reference to position of the Society on bill 88, A.

(f) Position of the Council with reference to the listing of non-members on the open panels of the Employers Mutuals Company.

(g) Position of the Council with reference to bill 733, A, refusing the request of the Medical Society of Milwaukee County to change the wording so as to permit individual action by each Society without Council approval.

(h) Approval of a special emergency appropriation of $5,000.

(i) Approval of an additional appropriation for the Committee on Public Policy of $700.

(j) Approval of the Constitution and By-Laws of the Wisconsin Health Council.

(All of these mail ballots received a very large affirmative vote with only occasional dissenting vote.)

Moved by Gleason-Duer that these affirmative mail ballots be recorded as action of the Council. Carried.

5. **Report of Auditing Committee.** The Chairman announced that due to the absence of Dr. Frank W. Pope, Racine, he had appointed Dr. Chas. M. Gleason of Manitowoc to fill the temporary vacancy on the Auditing Committee. The Auditing Committee consisting of Drs. Joseph F. Smith, Wausau; Chas. M. Gleason, Manitowoc, and Robert W. Blumenthal, Milwaukee, reported that they had carefully inspected the Auditor's Reports for Mr. Crownhart as Secretary, for Mr. Crownhart as Managing Editor of the Journal, and for Dr. Rock Sleyster as Treasurer; that the reports were found to be in proper order and that they recommended that they be accepted and approved each for the calendar year 1934. Moved by Smith-Pope that the report of the Auditing Committee and its recommendations be accepted and approved by the Council. Carried.

6. **Affiliate Fellow.** The Secretary reported that Dr. William Sweemer, Milwaukee, having reached the age of eighty-two and having been a member of the Society continuously for the requisite number of years, is entitled to election as Affiliate Fellow of the American Medical Association. It was moved by Blumenthal-Cunningham that the Society propose the name of Dr. Sweemer for such Affiliate Fellowship. Carried.

7. **Rotating List of Orthopedic Specialists for Clinics.** The Secretary reported the application of Dr. R. P. Montgomery, assistant orthopedic surgeon in the Wisconsin Orthopedic Hospital, to be listed on the rotating list of orthopedic specialists who conduct orthopedic clinics. Dr. Montgomery's qualifications were presented in detail. It was moved by Stang-Gavin that Dr. Montgomery's name be added to such list. Carried.

8. **Approval of Serum Center.** Dr. Maurice Hardgrove of the Serum Center of Columbia Hospital, Milwaukee, requested formal approval of the Center by the Council. It was related that this Center was one of three licensed by the Federal Government. After discussion it was moved by Pope-Cunningham that the Council approves of the Serum Center of Columbia Hospital, Milwaukee, as now operated.

9. **Committee on Medical Economics.** The Secretary placed before the Council a proposed supplementary report to the House of Delegates as prepared by the Committee on Medical Economics. The report was thereupon discussed by Drs. Fox, Arveson, Duer, Sleyster, Smith, Cunningham, Blumenthal, Rogers, Stang, Pope, and Gleason. It was moved by Duer-Johnson that paragraph numbered as 5 be amended so as to provide that the cards therein designated should not be distributed except by approval of component County Medical Societies. After discussion the amendment was lost by a vote of 4 to 5. A second amendment proposed by Dr. Sleyster revising the wording of the first paragraph of Section 5 was carried 7 to 3. It was then moved by Gavin-Johnson that the Committee on Medical Economics present its supplementary report to the House of Delegates. Division was called for on this question with the following result:

For submitting the report to the House of Delegates—Drs. Pope, Johnson, Gavin, Gleason, Rogers, Smith, Cunningham, Blumenthal and Stang—9.

Voting no—Dr. Duer—1.

So the motion was carried.

10. **University of Wisconsin Postgraduate Suggestion.** The Secretary presented Dr. William S. Middleton, Dean of the Medical School, University of Wisconsin. Dr. Middleton made the following statement:

"Mr. Chairman, Gentlemen of the Council:

"For over twenty years I have belonged to this organization and have been one of you in all of your transactions. I have experienced infinite con-

sideration and kindness at your hands, for which I am truly grateful. Within the past few weeks my status has been changed through my appointment as Dean of the Medical School of the University of Wisconsin. In my new responsibilities I bespeak your continued tolerance and support. I shall need them.

"In return you may well inquire my viewpoint upon matters of mutual interest. To begin with, I am first and last a clinician. I know no politics. I recognize no color, creed, nor religion in medicine. I have faith in the future of medicine. I expect organized medicine to lay its course with an eye single to the ultimate welfare of humanity. In so doing, I believe that the monetary interests of our profession will be safeguarded by a grateful public. In spite of forces now active to the contrary, the protection of the public and individual health is still a function of the medical profession, and I do not believe we can abrogate this responsibility without detriment to the sick.

"The University of Wisconsin is the physical evidence of a sovereign state's desire for intellectual expression. As such, it must look ahead and not behind. It must be progressive and not reactionary, retain the proved while rejecting the disproved. Your University cannot grow, nor for that matter exist, through the development of the individual at the expense of the mass. There is no place for self-aggrandizement in your University. The faculties of its several schools recognize this principle. Your University is more permanent than any of its faculties or its physical plant. It shall stand to instruct and guide your children and your children's children.

"In accepting my new responsibilities as Dean of the Medical School, I realize that I have become the steward of a solemn trust, and I shall attempt to discharge by duties with this primary thought. I am in no sense interested in an overwhelming centralization of medical forces, physical or otherwise, in your University. It is my firm conviction that the influence of the Medical School should be centrifugal rather than centripetal. In this relation I admit no division of ideals between the profession of the State and the Medical School of their University. Insofar as our facilities permit, (and Dr. Bleckwenn will outline the results of his Herculean efforts in a few moments) I pledge them to the educational interests of all physicians through the state.

"Gentlemen: I know the rules; I shall play the game."

The Secretary presented Dr. W. J. Bleckwenn of the University, who presented for preliminary consideration the formulation of a new program for postgraduate education. Dr. Bleckwenn's presentation follows:

"As Chairman of the Committee on State Relations, appointed by Dean Middleton, University of Wisconsin Medical School, I wish to present to the Councilors and the State Medical Society, the results of our deliberations and suggestions.

"As the name implies, the purpose of our Committee is to cement the relationship between the teaching institution and the practicing physician.

"If we analyze the functions of a medical school, we realize that they involve (1) factual investigation (research), (2) the collection of information (library service), (3) the dissemination of knowledge (actual instructional effort), and (4) application of our knowledge to the needs of man (practice).

"Let us briefly consider these various functions. Research in medicine in the past century has been profound and mainly conducted in our modern medical schools and institutes. In the past twenty years, however, a very insidious influence has been operating which has made serious inroads into this system. I refer particularly to the large industrial research institutes which have taken over the medical research which concerns industry. Such research is necessarily limited in breadth and extent. The sole objective of big business in such an effort is merely to increase the out-put and efficiency of their organization. It is tinctured as a business enterprise and inevitably will be an avenue by which corporate medicine may gain a foot-hold. To prevent commercialization of medical research, it would be far safer were it left where it best serves the interests and welfare of all mankind—in the medical schools.

"The collection of medical facts or information is a tremendous task. No one man, even if so employed, can hope to accumulate or absorb all of the information available. Tons of literature appear annually. Over two thousand journals relating to medicine and allied sciences exist, seven hundred of which come from America alone. The physician cannot keep up with his practice and read more than two or three journals. Practically every publication of merit contains some article that might be of interest to the general practitioner. He obviously never gets to know these more important contributions. Topics that appear in the minutes of the proceedings of various societies never get to him first hand. Unless he can read the article or an abstract in one of the more popular journals, a year or more may elapse before he is informed. Looking at this problem from another angle, it is almost impossible for the general practitioner to evaluate that which he reads unless he is familiar with the author or knows of some corroborative work done elsewhere. Von Haller produced thirteen thousand scientific papers. This is really the feat of a literary genius, hardly that of a scientist. This, to me, was an offense even though it was a record. If men who wrote realized that their effort should be to add permanently to our knowledge and not merely to re-hash, confirm or to reiterate that which others have said, our problem might be simplified. I believe we have all arrived at a point where we appreciate that the number of papers by any author is in inverse ratio to their value. It will be seen that a university library with a system where facts

can be digested and accumulated is an indispensable unit in the service to the student and physician. It prevents the endless wading through literature and affords a method of obtaining the best information from recognized authorities.

"As a further dispenser of the present accepted facts, the teaching specialist, in his field of interest, can inform the student and practitioner in a terse, concise way. If truly efficient, he will give the more important and substantiated facts found in the literature, and then present this information plus his own experience and the interpretations of the results of his application or practice.

"This method of instruction, of course, is supplementary to the general scheme for the interchange, advancement, dissemination, and employment of medical knowledge which occurs in our local, state and national medical publications and organizations.

"Our Committee feels the need of this additional type of service and recommends it for your consideration as a part of a joint program between the State Medical Society and the State University.

"We emphasize the need for the appreciation of the significance of this combined social relationship. Our Committee assures you, that under the leadership of our Dean, who exemplifies all of the desired qualities of loyalty, intellectual honesty, and cooperation, it proposes to present this series of symposia and individual programs throughout our State with the hope of rendering a much needed service to the profession. It will inevitably foster the mutual respect of the public for our cooperative scholarship which has a common purpose—the better care of the sick in Wisconsin.

"This united effort must obviously be free of any thought of interference with the effort or ambition of the individual practitioner. Likewise, there can be no suspicion of ulterior motive on our part, that in assuming a teaching role we might be making the effort to further personal aggrandizement or individual professional following. We offer this additional method of advancing and disseminating medical knowledge to the physicians of our State in the spirit of service alone."

It was moved by Sleyster-Stang that the report be referred to the Council for careful consideration. Carried.

It was moved by Sleyster-Blumenthal that the Chairman of the Council be empowered to appoint a committee to study the proposals as submitted, reporting therein at the January, 1936, meeting of the Council. Carried.

11. **Crippled Children Program.** The Secretary presented the following letter to the Council:

State of Wisconsin
Department of Public Instruction
Madison, September 6, 1935.

Mr. George Crownhart,
Secretary, State Medical Society,
Madison, Wis.

Dear Mr. Crownhart: As you know, the state legislation regarding the Federal Social Security Act is still pending. Rather than wait any longer, I thought that it would be best to plan now for the Medical Advisory Committee. I was anxious to have the matter presented before your convention of the State Medical Society in order that consideration might be given by the Council in regard to the persons who are to be appointed on that committee. I will appreciate it if the Council will choose the members of the committee and I will abide by that choice. It will be appreciated if the following interests can be represented on this committee:

1. Secretary of the State Medical Society.
2. Orthopedic Surgery.
3. Pediatrics.
4. Cardiac Problems.
5. One to represent the interests of those far removed from large urban centers.

Since the Cardiac Committee of your State Medical Society has rendered such very valuable service during the past two years, I am wondering whether that committee could continue to function. There are so many problems in connection with the orthopedic schools that are of interest only to cardiac specialists that I believe it would be worth while to continue to have a separate committee. In connection with that committee I wondered whether you might wish to appoint Dr. Chester M. Kurtz of Madison to the Cardiac Committee, of which Dr. John Huston of Milwaukee, as you know, is chairman. Dr. Kurtz has given us considerable assistance in connection with cardiac cases under supervision of the orthopedic school at Madison, and I am sure he would be a valuable member on the Cardiac Committee.

Since the federal appropriation was not made for the work for crippled children, it will not be possible to extend our present program until such federal appropriation is made. I would imagine, however, that this will be done when Congress meets in January. In the meanwhile it should be possible for us to make rather definite plans for clinic service and other activities and it will be helpful to have the advice of the Medical Advisory Committee.

Appreciating any assistance which you can give in regard to this program, I am

Sincerely yours,
Marguerite Lison Ingram,
Director, Crippled Children Division.

Moved by Pope-Duer that the Chairman of the Council be empowered to appoint the requested committee as the committee of the Council subject to change in personnel at each annual meeting of the Council. Carried. (The Chair subsequently appointed the Secretary; Dr. J. W. Powers, Milwaukee; Dr. H. Kent Tenney, Madison; Dr. Chester M. Kurtz, Madison and Dr. Alexander Nadeau, Marinette.)

12. **Adjournment.** The meeting adjourned at 4:30 p. m.

SECOND MEETING OF THE COUNCIL

Directors' Room, Milwaukee Auditorium, Wednesday, September 18, 1935

1. **Roll Call.** The Council was called to order at 12:30 noon by the Chairman, A. W. Rogers of Oconomowoc. The roll call disclosed the following present: Councilors Rogers, Pope, Duer, Smith, Gavin, Gleason, Johnson, Jegi, Blumenthal, and Cunningham; President O'Leary; President-Elect Carter; Speaker Gundersen; Past-President Seeger; Dr. Patek, Secretary of the Committee on Medical Defense; President Coventry and Secretary Meyerding of the Minnesota State Medical Association; Dr. Fox, Chairman of the Committee on Medical Economics, and Mr. Crownhart, the Secretary.

2. **Medical Defense.** Dr. Patek, speaking for the Committee on Medical Defense, related that counsel for the Committee had presented his resignation by reason of desire to enter upon specialized work. He reported that Mr. Ralph M. Hoyt of Milwaukee, former Assistant Attorney-General of the State and until recently President of the Wisconsin Title Company, had resumed private practice. Dr. Patek reported that Mr. Hoyt was former counsel for the Committee and that the Committee, at all times pleased with his work, recommended his employment at this time to succeed Mr. Robert R. Freeman, resigned. It was moved by Blumenthal-Pope that Mr. Ralph Hoyt be elected as legal counsel for the Medical Defense system of the Society. Carried.

3. **College of Surgeons.** Councilor Gleason related to the Council for their information the constantly increased demands by representatives of the American College of Surgeons with reference to hospital practices. A general discussion followed.

4. **Academy of Ophthalmology and Otolaryngology.** Councilor Gleason asked whether it would not be possible to avoid a future conflict between the American Academy of Ophthalmology and Otolaryngology and the State Meeting. The Secretary reported on previous efforts to this end and declared that future efforts to avoid such a conflict would be redoubled.

5. **Detention of Suspected Insane.** Councilor Gleason discussed the advisability of action by county medical societies looking towards avoidance of a situation now generally prevalent wherein those suspected of insanity were frequently detained in the county jail. It was moved by Pope-Duer that the Secretary advise officers of the component county medical societies of this situation, suggesting local action looking toward the detention of the suspected insane in county insane institutions rather than in the local jails. Carried.

The meeting adjourned at 1:25 p. m.

THIRD MEETING OF THE COUNCIL

Directors' Room, Milwaukee Auditorium, Thursday, 12:15 Noon, September 19, 1935

1. **Roll Call.** Disclosed the following present: Councilors Smith, Duer, Johnson, Cunningham, Gavin, Gleason, Jegi, Butler, Blumenthal, and Pope; President O'Leary; President-Elect Carter; Speaker Gundersen; former Councilor Heidner; Mr. Crownhart, Secretary, and Mr. Larson, Assistant.

2. **Exhibit.** The Secretary reported an invitation from the Secretary of the American Medical Association to prepare an exhibit of the Society's activities to be shown at the Annual Conference of Secretaries in November. The Secretary reported that if the exhibit were prepared it would also be available for Councilor District Meetings during 1936. Moved by Duer-Smith that the sum of $75.00 be allotted from the general fund for the preparation of such an exhibit. Carried.

3. **Councilor Representation.** It was moved by Johnson-Gleason that in event a Councilor was unable to attend a Councilor meeting, he might appoint as a substitute the President or Secretary of his Councilor District Society to attend such meeting without, however, the right to vote. Carried.

4. **Suspension of Dues.** It was moved by Cunningham-Duer that further payment of State Society dues for Dr. Mina B. Glasier, for thirty-five years Secretary of the Grant County Medical Society, and possessor of the Council Award, be indefinitely suspended. Carried.

The Council adjourned at 1:25 p. m. subject to call of the Chairman.

J. G. Crownhart,
Secretary of the Council.

Approved:
A. W. Rogers, *M. D.*
Chairman of the Council.

Officers—Committees, State Medical Society of Wisconsin

Elected by House of Delegates: President, president-elect, speaker, vice-speaker, and councilors. Elected by Council: Secretary and Treasurer. Appointed by president-elect: One member on each standing committee to serve a three-year term.

President:
Ralph M. Carter, Green Bay__Sept., 1936

President-Elect:
Stephen E. Gavin, Fond du Lac_Sept., 1936

Secretary:
J. G. Crownhart, Madison____Jan., 1936

Treasurer:
Rock Sleyster, Wauwatosa____Jan., 1936

Speaker:
Gunnar Gundersen, La Crosse_Sept., 1936

Vice-Speaker:
James C. Sargent, Milwaukee_Sept., 1936

Delegates to American Medical Association:
J. Gurney Taylor, Milwaukee_Sept., 1936
W. E. Bannen, La Crosse_____Sept., 1936
Joseph F. Smith, Wausau____Sept., 1937

Alternate Delegates:
S. J. Seeger, Milwaukee_____Sept., 1936
S. E. Gavin, Fond du Lac_____Sept., 1936
C. W. Giesen, Superior_____Sept., 1937

COUNCILORS

First: Dodge, Jefferson, Waukesha County Societies. *A. W. Rogers*, Oconomowoc, 1936.

Second: Kenosha, Racine, Walworth County Societies. *Frank W. Pope*, Racine, 1936.

Third: Dane, Columbia, Green, Rock, Sauk County Societies. *Joseph Dean*, Madison, 1937.

Fourth: Crawford, Grant, Iowa, Lafayette, Richland County Societies. *W. Cunningham*, Platteville, 1937.

Fifth: Calumet, Manitowoc, Sheboygan, Washington–Ozaukee County Societies. *C. M. Gleason*, Manitowoc, 1937.

Sixth: Brown–Kewaunee–Door, Outagamie, Fond du Lac, Winnebago County Societies. *S. E. Gavin*, Fond du Lac, 1937.

Seventh: Juneau, La Crosse, Monroe, Trempealeau–Jackson–Buffalo, Vernon County Societies. *H. A. Jegi*, Galesville, 1938.

Eighth: Marinette–Florence, Oconto, Shawano County Societies. *G. R. Duer*, Marinette, 1938.

Ninth: Clark, Green Lake–Waushara–Adams, Lincoln, Marathon, Portage, Waupaca, Wood County Societies. *Joseph F. Smith*, Wausau, 1938.

Tenth: Barron–Washburn–Sawyer–Burnett, Polk, Chippewa, Eau Claire–Dunn–Pepin, Pierce–St. Croix, Rusk County Societies. *F. E. Butler*, Menomonie, 1938.

Eleventh: Ashland–Bayfield–Iron, Douglas County Societies. *F. G. Johnson*, Iron River, 1936.

Twefth: Medical Society of Milwaukee County. *R. W. Blumenthal*, Milwaukee, 1936.

Thirteenth: Forest, Oneida–Vilas, Langlade, Price–Taylor County Societies. *J. W. Lambert*, Antigo, 1938.

STANDING COMMITTEES

1. *The Committee on Scientific Work:*
   Gunnar Gundersen, La Crosse, Chm., 1938
   John O. Dieterle, Milwaukee, 1937
   Arnold S. Jackson, Madison, 1936
2. *The Committee on Public Policy:*
   S. E. Gavin, Fond du Lac, Chm., 1938
   R. H. Jackson, Madison, 1937
   Dexter H. Witte, Milwaukee, 1936
   President, President-Elect, Secretary, ex officio
3. *The Editorial Board:*
   F. Gregory Connell, Oshkosh, Chm., 1937
   Oscar Lotz, Milwaukee, 1936
   Stanley J. Seeger, Milwaukee, 1938
4. *The Committee on Medical Defense:*
   E. G. Ovitz, Laona, Chm., 1938
   A. J. Patek, Milwaukee, Secretary, 1936
   H. P. Bowen, Watertown, 1937
5. *The Committee on Medical Education and Hospitals:*
   W. S. Middleton, Madison, Chm., 1938
   J. W. Prentice, Ashland, 1937
   F. D. Murphy, Milwaukee, 1936
6. *The Committee on Medical Economics:*
   A. E. Rector, Appleton, Chm., 1938
   P. A. Fox, Beloit, 1937
   R. G. Arveson, Frederic, 1936
7. *The Committee on Health and Public Instruction:*
   Wenzel Wochos, Kewaunee, Chm., 1938
   C. H. Christiansen, Superior, 1937
   R. W. Blumenthal, Milwaukee, 1936
8. *The Committee on Necrology:*
   Councilors and Secretary
9. *The Cancer Committee:*
   W. D. Stovall, Chm., Madison, 1937
   D. L. Dawson, Rice Lake, 1938
   R. L. MacCornack, Whitehall, 1938

C. G. Richards, Kenosha, 1938
F. Eigenberger, Sheboygan, 1937
F. Gregory Connell, Oshkosh, 1936
W. E. Ground, Superior, 1936
Paul Doege, Marshfield, 1937
F. B. McMahon, Milwaukee, 1937
G. R. Duer, Marinette, 1936
J. F. Wilkinson, Oconomowoc, 1936
G. Benson, Richland Center, 1938
G. E. Moore, Antigo, 1938

10. *The Committee on Coordination of Medical Services:*
Joseph F. Smith, Wausau, Chm., 1938
F. E. Butler, Menomonie, 1937
S. E. Gavin, Fond du Lac, 1936
President
The Secretary, ex officio

SPECIAL COMMITTEES

(President appoints annually)

11. *The Special Committee on Child and Maternal Health and Protection:*
Carl Henry Davis, Milwaukee, Chm.
A. B. Schwartz, Milwaukee
R. L. Cowles, Green Bay
Carl S. Harper, Madison
H. A. Sincock, Superior
W. T. Clark, Janesville
President and Secretary, ex officio

12. *The Committee on Medical Care for Veterans:*
C. A. Dawson, River Falls
Otho A. Fiedler, Sheboygan
E. C. Cary, Reedsville

13. *The Committee on Medical History:*
F. Gregory Connell, Chm., Oshkosh
(Power to appoint associates)

14. *The Committee on Workmen's Compensation:*
Edward Quick, Milwaukee, Chm.
A. G. Sullivan, Madison
W. G. Sexton, Marshfield

15. *The Committee on Commitment of the Insane:* (Appointed to end of 1937 Legislative Session)
H. W. Powers, Milwaukee
W. T. Kradwell ,Wauwatosa
R. E. Mitchell, Eau Claire

16. *The Committee on Institutional Care:*
(To be appointed)

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17. *The Committee on Licensing of Hospitals:*

COMMITTEES OF COUNCIL

1. *The Executive Committee of the Council:*
President
Chairman of the Council
Treasurer
Secretary
S. E. Gavin, Fond du Lac, 1936
R. W. Blumenthal, Milwaukee 1936

2. *The Advisory Committee to the Woman's Auxiliary:*
F. W. Pope, Racine, 1938
A. W. Rogers, Oconomowoc, 1937
Rock Sleyster, Wauwatosa, 1936
President and Secretary, ex officio

3. *The Auditing Committee:*
F. W. Pope, Racine
J. F. Smith, Wausau
R. W. Blumenthal, Milwaukee

4. *The Advisory Committee on Care of Crippled Children:*
J. W. Powers, Milwaukee, Chm.
A. T. Nadeau, Marinette
C. M. Kurtz, Madison
H. Kent Tenney, Madison
Secretary, ex officio

5. *The Advisory Committee on Cardiac Conditions in Crippled Children:*
John Huston, Milwaukee, Chm.
M. F. Rogers, Milwaukee
L. M. Warfield, Milwaukee
C. M. Kurtz, Madison
Secretary, ex officio

6. *Advisory Committee on Postgraduate Proposal:*
Joseph F. Smith, Wausau, Chm.
Stephen E. Gavin, Fond du Lac
Rock Sleyster, Wauwatosa

Increased Membership Reported for State Medical Society; Over 2,200 for 1935

Abbotsford:
Shields, G. G.
Ableman:
McGonigle, B. E.
Abrams:
Faulds, R. C.
Adams:
Shapiro, Harry
Adell;
Bemis, Ira M.
Albany:
Blum, O. S.
Weissmiller, L. L.
Algoma:
Foshion, H. V.
Witcpalek, W. W.
Allenton:
Fisher, R. S.
Alma:
Larson, J. A.
Almena:
Arneson, Thomas
Almond:
Meyer, M. W.
Amery:
Cornwall, W. B.
Waterman, I. L.
Amherst:
Schroeder, C. F.
Antigo:
Bloor, E. G.
Curran, W. P.
Donohue, M. J.
Dorzeski, E. F.
Flatley, M. A.
Lambert, J. W.
McKenna, E. A.
Moore, G. E.
Portman, R. J.
Steffen, L. A.
Wright, J. C.
Zellmer, C. E.
Appleton:
Banister, E. B.
Benton, J. L.
Bolton, E. L.
Brooks, E. H.
Carlson, G. W.
Dehne, W. O.
Dohearty, F. P.
Frawley, W. J.
Gallaher, D. M.
Harrington, Wm. J.
Hegner, G. T.
Huberty, F. J.
Krueger, E. N.
Landis, R. V.
MacLaren, J. B.
Marshall, V. F.
Marshall, W. S.
McCarty, R. T.
McGrath, E. F.
Mielke, E. F.
Mills, N. P.
Neidhold, C. D.
Pardee, C. A.
Rector, A. E.
Reeve, J. S.
Ritchie, G. A.
Ryan, C. E.
Swanton, M. E.
Arcadia:
Comstock, E.
Palmer, J. A.
Skroch, J. P.
Weber, F. T.
Argyle:
Williams, W. B.
Arpin:
Stiles, W. W.
Ashland:
Andrus, A. D.
Dodd, J. M., Jr.
Dodd, J. M., Sr.
Grand, C. A.
Grigsby, R. O.
Hertzman, C. O.
Hosmer, M. S.
Prentice, J. W.
Smiles, C. J.
Tucker, W. J.
Weeks, F. D.
Young, M. L.
Athens:
Bachhuber, H. M.
Frick, Lewis
Augusta:
Prill, H. F.
Baldwin:
Kunny, B.
Swenson, G. B.
Balsam Lake:
Meilicke, W. A.
Bangor:
Ruppenthal, K. P.
Ward, M. W.
Baraboo:
Cahoon, Roger
Farnsworth, A. L.
Fenton, R. L.
Irwin, H. J.
McGrath, E.
Snyder, A. F.
Tryon, F. E.
Winslow, F. R.
Barron:
Coleman, H. M.
Edwards, P. K.
Post, C. C.
Ruethin, K. A.
Schlomovitz, H. H.
Smith, Russell C.
Barton:
Driessel, S. J.
Bayfield:
Robertson, M. J.
Shumate, J. K.
Bear Creek:
Morneau, L. F.
Beaver Dam:
Corso, Xavier
Gascoigne, C. C.
Hammond, A. W.
Hough, A. G.
Hoyer, A. A.
Hoyer, G. H.
O'Hora, C. M.
Roberts, R. R.
Rosenheimer, A. M.
Schoen, R. E.
Temkin, M. M.
Webb, E. P.
Welsch, J. M.
Belgium:
Huth, Elmore P.
Belleville:
Donlin, W. F.
Belmont:
Hubenthal, J. C.
Beloit:
Allen, Jessie P.
Allen, W. J.
Baldwin, R. M.
Brinckerhoff, F. E.
Brown, E. B.
Crockett, W. W.
Crone, V. D.
Flarity, T. H.
Fosse, B. O.
Fox, P. A.
Friend, L. J.
Friske, Oscar W.
Helm, H. M.
Kasten, H. E.
Keithley, J. W.
Kishpaugh, H. W.
Lemmel, J. T.
Ottow, A. F.
Raube, H. A.
Shearer, H. A.
Shinnick, T. F.
Smith, C. E.
Thayer, F. A.
Thayer, R. A.
Vivian, R. S.
Wilson, R. F.
Zwaska, A. B.
Benton:
Leitzell, P. W.
Berlin:
Casper, S. L.
Scott, B. E.
Wiesender, A. J.
Birchwood:
Ainsworth, H. H.
Black Creek:
Laird, J. J.
Black River Falls:
Krohn, Irwin
Krohn, Robert
Mannis, Harry
Blair:
Richards, R. R.
Bloomer:
Clauson, C. T.
Fortner, W. H.
Hudek, D. F.
Trankle, H. M.
Bloomington:
Baldwin, F. H.
Glasier, M. B.
McLaughlin, H. J.
Blue Mounds:
Bancroft, H. V.
Blue River:
Randall, M. W.
Bonduel:
Terlinden, J. H.
Boscobel:
Freymiller, E. F.
Hayman, C. S.
Spiegelberg, E. H.
Tuffley, F. S.
Boulder Junction:
Newcomb, K. P.
Brandon:
Guth, H. K.
Hull, H. H.
Briggsville:
Boots, F. W.
Brillion:
Boyden, W. L.
McComb, I. N.
Wagner, A. J.
Brodhead:
Mitchell, E. J.
Ross, M. E.
Taylor, A. R.
Brooklyn:
Gray, Rodney J.
Brownsville:
Raymond, R. G.
Bruce:
Whalen, M. L.
Burlington:
Bennett, J. F.
Newell, G. W.
Prouty, W. A.
Cable:
Clark, Kate Kelsey
Cadott:
Fuller, J. D.
Zenner, C. E.
Cambria:
Ronneburger, E. O.
Williams, W. E.
Cambridge:
Amundson, K. K.
Bilstad, G. E.
Cameron:
Cronk, C. F.
Hoffman, E. F.
Campbellsport:
Guenther, O. F.
Hoffmann, L. A.
Casco:
Fencil, Y. J.
Kerscher, E. J.
Cashton:
Cremer, C. H.
Mauel, N. M.

Cassville:
Blackbourn, F. E.

Cato:
Kelley, J. M.

Cedarburg:
Blanchard, P. B.
Hurth, O. J.
Katz, H. M.

Cedar Grove:
Van Altena, L. A.
Voskuil, A.

Centuria:
Noyes, G. B.

Chaseburg:
Remer, W. H.

Chetek:
Adams, R. W.
Hume, A. T.

Chilton:
Goggins, J. W.
Knauf, N. J.
Minahan, J. J.

Chippewa Falls:
Beier, A. L.
Field, Merton
Hatleberg, C. B.
Henske, W. C.
Kelly, J. A.
McCarty, E. O.
McHugh, F. T.
McRae, J. D.
Rodgers, R. S.
Schwartz, R.
Somers, A. J.
Williams, S. E.

Clear Lake:
Campbell, L. A.
Nelson, A. N.

Cleveland:
Reinert, E. N.

Clinton:
Parker, A. S.
Thomas, W. O.

Clintonville:
Finney, W. H.
Miller, E. A.
Murphy, J. H.

Cochrane:
Meili, Emmett A.

Colby:
Christofferson, H. H
Schemmer, A. L.

Coleman:
Graner, L. H.

Colfax:
Cooper, C. A.
Felland, O. M.

Columbus:
Caldwell, H. M.
Mudroch, J. A.
Poser, E. M.
Schmeling, A. F.
Watson, E. L.

Coon Valley:
Solberg, A. A.

Cornell:
Foster, J. H. A.

Crandon:
Huth, Edgar W.
Ison, G. W.

Cross Plains:
Froggatt, W. E. L.

Cuba City:
Bair, F. M.
Donnell, J. E.

Cudahy:
Ackerman, J. S.
Fine, J. M.
Krueger, B.
Lawler, E. M.
Partridge, C. D.
Smith, H. S.

Cumberland:
Grinde, G. A.
Lund, S. O.
Thompson, R. C.

Dale:
Archer, W. E.

Dallas:
Simonson, S. W.

Darien:
O'Brien, H. N.

Darlington:
Orton, Susanne

De Forest:
Bertrand, J. H.

Delafield:
Barnes, H. T.

Delavan:
Crowe, N. F.
Doughty, J. W.
Jacobson, T. L.
Kenney, H. J.
Warrick, J. D.
Wright, C. A.

Denmark:
Hager, F. J.
Vosburgh, W. H.

De Pere:
Bolles, C. S.
Kersten, N. M.
Lenz, R. B.

DeSoto:
Myrick, A. L.

Dodgeville:
Hagerup, T. A.
Hamilton, D. B.
Morton, H. H.
Reese, William
Walker, H. M.

Dorchester:
Foley, F. P.

Dousman:
Schneider, Hans

Durand:
Buckley, R. A.
Schulberg, P. A.

Eagle River:
McMurry, O. R.
Oldfield, R. A. A.

East Troy:
Meany, S. G.
Mullen, R. A.

Eau Claire:
Anderson, F. G.
Baird, J. C.
Beebe, G. W.
Cook, F. S.
Derge, H. F.
Falstad, C. H.
Flynn, L. H.
Fuson, H. S.
Haag, A. F.
Hayes, E. P.
Henke, S. L.
Hoyme, G.
Kinsman, F. C.
Kohl, Martha
LaBreck, F. A.
Manz, Walton
Mason, E. L.
Midelfart, H. C. U.
Mitchell, R. E.
Payne, A. L.
Scullard, G.
Seemann, W. O.
Stang, H. M.
Stoland, I.
Tanner, J. W.
Tupper, E. E.
Werner, Nels
Werner, R. F.
Ziegler, J. E. B.

Eden:
Hardgrove, J. H.

Edgerton:
Cleary, B. L.
Morrison, W. W.
Shearer, A. T.
Shearer, F. E.
Sumner, W. C.

Elcho:
Dailey, P. J.

Elderon:
McNulty, E. J.

Eldorado:
Jackson, F. A.

Elkhart Lake:
Rothenmaier, G. L.

Elkhorn:
Harris, C. F.
Herzog, J. V.
Ridgway, E. T.
Sorenson, E. D.

Ellsworth:
Addington, E.
Nylander, E. G.

Elmwood:
Breed, A. L.

Elroy:
Ferguson, F. H.
Vogel, C. A.
Vogel, C. C.

Ettrick:
Rogne, C. O.

Evansville:
Guilfoyle, J. P.
Smith, C. M.

Fairchild:
Gibson, H. V.

Fall Creek:
Zboralski, F. F.

Fall River:
Hunt, F. O.

Fennimore:
Bailey, M. A.
Howell, E. C.
Marsden, T. H.

Fond du Lac:
Borsack, K. K.
Boudry, M. O.
Boyd, G. T.
Devine, H. A.
Devine, J. C.
Finn, W. C.
Florin, A. C.
Folsom, W. H.
Gardner, L.
Gavin, S. E.
Helz, J. W.
Hutter, A. M.
Johnson, B. W.
Layton, O. M.
Leonard, C. W.
McCabe, P. G.
Meiklejohn, D. V.
Mills, R. G.
Pawsat, E. H.
Pullen, A. J.
Rehorst, J. J.
Sharpe, H. R.
Sharpe, J. J.
Simon, L. J.
Smith, E. V.
Twohig, D. J.
Twohig, H. E.
Twohig, J. E.
Waffle, R. L.
Waldschmidt, W. J.
Walters, D. N.
Werner, H. C.
Wier, J. S.
Wiley, F. S.
Wojta, W. C.
Yockey, J. C.

Footville:
Harvey, J. R.

Forest Jct.:
Wollersheim, P. J.

Forestville:
Hirschboeck, J. G.

Ft. Atkinson:
Caswell, H. O.
Chase, Estelle S.
Franzel, J. E.
Gruesen, Frank A.
Hanson, O. H.
Majerus, P. J.
Morris, R. C.
Venning, J. R.
Young, Will

Fountain City:
Reinhardt, J. P.
Skemp, F. C.

Fox Lake:
Elliott, E. S.

Franksville:
O'Brien, G. M.

Frederic:
Andrews, W. C.
Arveson, R. G.
Diamond, J. A.

Friendship:
Treadwell, G. F.

Galesville:
Alvarez, R. L.
Jegi, H. A.
Younker, F. T.

Gays Mills:
Ackerman, E. T.
Lund, H. C.

Genesee Depot:
Zietlow, F. G.

Genoa City:
Bill, B. J.

Germantown:
Dehmel, R. W.

Gillett:
Baldwin, L. H.
Berg, W. R.

Gilman:
Hable, A. P.

Glenbeulah:
Hansen, John

Glenwood City:
McCusker, C. F.
McMahon, A. E.

Grafton:
Balkwill, C. A.

Granton:
Rath, R. R.
Wink, R. H.

Green Bay:
Atkinson, H. S.
Bartran, W. H.
Brusky, A. H.
Buchanan, R. C.
Burdon, T. S.
Burns, Robert
Carter, R. M.
Charbonneau, A.
Chloupek, C. J.
Clifford, P. M.
Colignon, J. C.
Comee, William
Cowles, R. L.
Crikelair, F. L.
Decker, W. J.
DelMarcelle, C. C.
Denys, G. F.
Dupont, A. J.
Ford, W. W.
Fuller, M. H.
Gosin, D. F.
Gosin, F. J.
Hagerty, W. T.
Halloin, J. E.
Hendrickson, H.
Icks, Karl
Jordan, E. M.
Kelly, W. W.
Killins, W. A.
Kispert, R. W.
Knox, E. S.
Leaper, W. E.
Levitas, I. E.
McCarey, A. J.
McNevins, E. S.
Milson, Lewis
Minahan, P. R.
Mueller, W. E.
Nadeau, E. G.
Oliver, T. J.
Olmsted, A. O.
Quigley, L. D.
Robb, J. J.
Rose, Felix
Saunders, O. W.
Schmidt, E. S.
Shewalter, G. M.
Stauff, G. R.
Stiennon, O. A.
Tippet, W. P.
Troup, R. L.
Williamson, C. S.
Wolter, H. A.

Green Lake:
Baldwin, G. E.

Greenleaf:
Titel, E. A.

Greenwood:
Olson, Wm. A.

Gresham:
Litzen, Floyd L.

Hales Corners:
Johnson, A. W.
Pierce, D. F.
Wolf, R. C.

Hammond:
Olson, C. A.

Hartford:
Hoffmann, J. G.
Lehmann, F. W.
Loughlin, T. F.
Monroe, M. E.
Sachse, F. W.

Hartland:
Bergwall, R. P.
Grover, F. L.
Nixon, H. G. B.

Hayward:
Callaghan, D. H.
Krueger, E. R.
Rideout, M. E.

Hazel Green:
Fillbach, H. E.

Highland:
Erickson, M. T.

Hilbert:
Slaney, A. F.
Winkler, R. J.

Hiles:
Flannery, J. V.

Hillsboro:
Hansberry, P. H.
MacKechnie, R. S.

Hixton:
Petzke, E. A.

Holmen:
Hanson, L. E.

Horicon:
Karsten, J. H.

Hortonville:
Towne, W. H.

Hudson:
Livingstone, J. W.
Newton, J. E.

Humbird:
Schwarz, S. G.

Hustisford:
Goetsch, O. F.
Panetti, P. A.

Independence:
Peterson, C. F.
Peterson, D. R.

Iola:
Wilker, W. F.

Iron River:
Johnson, F. G.

Jackson:
Froede, Herbert E.

Janesville:
Bartels, G. W.
Baumgartner, M. M.
Binnewies, F. C.
Clark, W. T.
Cunningham, M. A.
Danforth, H. C.
Farnsworth, F. B.
Farnsworth, R. W.
Fifield, G. W.
Frechette, F. M.
Freitag, S. A.
Gilbertsen, C. R.
Hartman, E. C.
Hartman, R. C.
Johnson, W. L.
Klein, Theodore
Kuegle, F. H.
Lapp, H. D.
McGuire, W. H.
Munn, W. A.
Neupert, C. N.
Nuzum, T. O.
Nuzum, T. W.
Overton, O. V.
Pember, A. H.
Snodgrass, T. J.
Stevens, J. V.
Sutherland, F. E.
VanKirk, F. W.
Waufle, G. C.
Welch, F. B.

Jefferson:
Brewer, J. C.
Busse, A. A.
Garding, C. J.

Johnson Creek:
Wendt, F. A.

Juda:
Gifford, H. B.

Junction City:
Reis, G. W.

Juneau:
Heath, H. J.
Hebenstreit, A. J.

Kaukauna:
Bachhuber, A. E. Jr.
Boyd, C. D.
Boyd, G. L.
Flanagan, G. J.
Leigh, Albert
Skibba, J. P.

Kenosha:
Adams, G. F.
Andre, E. F.
Ashley, T. W.
Bennett, L. J.
Bennett, W. H.
Binnie, Helen A.
Bowing, I. E.
Cleary, J. H.
Davin, C. C.
DeFazio, S. F.
Gephart, C. H.
Good, Palmer W.
Graves, J. P.
Hastings, J. F.
Hill, B. S.
Lamacchia, R.
Lansdowne, F. B.
Lipman, W. H.
Lokvam, L. H.
Mayfield, A. L.
McCarthy, G. W.
Murphy, S. W.
Pechous, C. E.
Pifer, P. E.
Pirsch, M. V.
Randall, A. J.
Rauch, A. M.
Richards, C. G.
Riordan, J. F.
Ripley, H. M.
Rose, H. L.
Ruffolo, A. F.
Schlapik, A.
Schulte, G. C.
Schwartz, G. J.
Schwartz, H. L.
Sokow, Theodore
Stewart, W. C.
Swarthout, E. F.
Thompson, G. E.
Ulrich, C. F.
Windesheim, G.

Kewaskum:
Edwards, R. G.
Hausmann, N. E.

Kewaunee:
Dana, D. B.
Dockry, L. E.
Wochos, F. J.
Wochos, W. M.

Kiel:
Knauf, F. P.
Nauth, D. F.

Kimberly:
Maes, C. G.

Kohler:
Cottingham, M. D.

La Crosse:
Anderson, N. P.
Bannen, W. E.
Callahan, J. L.
Carlsson, E. S.
Douglas, F. A.
Eagan, R. L.
Egan, G. J.
Eidam, L. W.
Evans, J. A.
Flynn, R. E.
Gallagher, E. E.
Garrett-Bangsberg, S.
Gatterdam, P. C.
Gray, R. H.
Gundersen, A.
Gundersen, Alf
Gundersen, G.
Gundersen, S. B.
Harmon, J. C.
Henke, W. A.
Heraty, J. E.
Houck, Mary Piper
Jones, W. J.
Lueck, G. W.
Mast, B. W.
McGarty, M. A.
McLoone, J. E.
Moran, C. J.
Reay, G. R.
Rosholt, J. A.
Roth, J. A.
Simones, V. L.
Sivertson, M.
Skemp, A. A.
Skemp, G. E.
Smedal, E. A.
Smith, D. S.
Smith, E. C.
Swarthout, Edyth C.
Townsend, E. H., Jr.
Welsh, S. M.
Wolf, H. E.

Ladysmith:
Lundmark, L. M.
O'Connor, W. F.
Smith, Woodruff

Lake Geneva:
MacDonald, W. H.
Wheeler, Theodora

Lake Mills:
Eck, G. E.
Engsberg, W. A.
Leicht, Phillip
Peterson, M. G.

Lancaster:
Doolittle, S. W.
Fowler, J. H.
Glynn, James D.
Godfrey, R. C.
Houghton, E. M.

Laona:
Ovitz, E. G.

Larsen:
Henrichsen, J. A.

Lena:
Rose, J. F.

Little Chute:
Curtin, D. W.
Doyle, J. H.

Lodi:
Irwin, G. H.

Loganville:
Jewell, E. L.

Lone Rock:
Newlove, F. E.

Luck:
Ries, T. O.

Madison:
Aageson, C. W.
Aitken, H. M.
Atwood, David
Bleckwenn, W. J.
Boner, A. J.
Bowman, F. F.
Boyce, S. R.
Briggs, S. J.
Brindley, B. I.
Brown, E. J.
Bryan, A. W.
Buerki, R. C.
Bunting, C. H.
Burke, C. F.
Burke, Myra
Burns, R. E.
Caldwell, Ruth
Calvert, Charlotte
Campbell, R. E.
Canan, M. C.
Carns, Marie L.
Carter, H. M.
Chorlog, J. I.
Chorlog, J. K.
Cline, Frances A.
Cole, L. R.
Cooksey, R. T.
Davis, F. A.
Dean, Frank K.
Dean, James P.
Dean, Joseph
Dean, Joseph C.
Dimond, W. B.
Ellis, Ivan G.
Elsom, J. C.
Evans, J. S.
Ewell, G. H.
Fauerbach, L.
Gale, J. W.
Ganser, W. J.
Geist, F. D.
Gonce, J. E., Jr.
Greeley, H. P.
Greene, H. L.
Guilford, H. M.
Gundersen, C. A. S.
Harper, C. A.
Harper, C. S.
Harris, J. W.
Henika, G. W.
Hill, N. A.
Hurlbut, J. A.
Hyslop, V. B.
Jackson, A. S.
Jackson, J. A., Jr.
Jackson, R. H.
Jerome, J. T.
Johnson, H. Curtis
Juster, E. M.
Kay, H. M.
Keck, E. B.
Kleinpell, W. C.
Krehl, W. H.
Kurtz, C. M.
Lacke, C. L.
Lee, J. H.
Lemmer, K. E.
Leonard, T. A. Jr.
Lewis, C. N.
Lindsay, W. T.
Littig, L. V.
Lorenz, W. F.
Lyght, C. E.
Marsden, W. H.
Marsh, H. E.
Masten, M. G.
McCormick, S. A.
McDonough, K. B.
McGary, Lester
McIntosh, R. L.
Meade, F. S.
Meanwell, W. E.
Meyer, O. O.
Middleton, W. S.
Montgomery, R. C.
Montgomery, R. P.
Mowry, W. A.
Neff, E E.
Nelson, O. O.
Nesbit, M. E.
Nesbit, W. M.
Newman. Robt.
Noer, R. J.
Paul, Lester W.
Pearson, C. R.
Pessin, S. B.
Pohle, E. A.
Puestow, K. L.
Purcell, H. E.
Quisling, A. A.
Quisling, G. D.
Quisling, R. A.
Quisling, Sverre
Reese, H. H.
Reineking, W. C.
Reznichek, C. G.
Ritchie, Gorton
Robbins, J. H.
Schmidt, E. R.
Schneiders, E. F.
Schubert, C. K.
Schwittay, A. M.
Sevringhaus, E. L.
Shulak, Irving
Sisk, I. R.
Sisk, J. N.
Smith, K. W.
Sprague, L. V.
Stebbins, G. G.
Stebbins, W. W.
Stehr, A. C.
Stiehm, R. H.
Stovall, W. D.
Sullivan, A. G.
Sullivan, E. S.
Supernaw, Jack
Taylor, F. B.
Tenney, H. K.
Thomas, Norman G.
Thornton, M. J.
Tormey, A. R.
Tormey, T. W.
Van Riper, H. Edgar
Van Valzah, R.
Vingom, C. O.
Virgin, H. W.
Washburne, A. C.
Waters, Ralph M.
Wear, J. B.
Weiland, H. P.
Welke, E. G.
Werrell, W. A.
Weston, F. L.
Wheeler, Robert
Williams, D. L.
Winn, H. N.
Wirig, M. H.

Maiden Rock:
Hogan, John

Manawa:
Irvine, R. K.
Irvine, W. J.

Manitowoc:
Aldridge, H. W.
Andrews, M. P.
Ball, E. J.
Bonner, N. A.
Donohue, W. E.
Gleason, C. M.
Gregory, L. W.
Hammond, F. W.
Hammond, R. W.
Hoffman, G. M.
MacCollum, C. L. R
Meany, J. E.
Rees, Thomas H.
Schneck, Nathan
Shimek, A. J.
Steckbauer, J. W.
Strong, R. G.
Stueck, A. F.
Teitgen, Arthur
Turgasen, F. E.
Wall, Charles E.

Marathon:
Barber, Joseph
Birnbaum, F. A.

Maribel:
May, J. H.

Marinette:
Berglund, S. A.
Bird, M. D.
Boren, C. H.
Boren, J. W.
Duer, G. R.
Jorgenson, H. L.
May, J. V.
Nadeau, A. T.
Pinegar, K. G.
Redelings, T. J.
Schroeder, H. F.
Shaw, Robert W.

Marion:
Mulvaney, F. M.
Van Schaick, R. E.

Markesan:
Blewett, M. T.
Pfisterer, F. W.

Marshfield:
Baldwin, R. S.
Boeckmann, F. A.
Copps, L. A.
Deitchman, M. M.
Doege, K. H.
Doege, P. F.
Hipke, Wm.
McCormick, G. L.
Millard, A. L.
Phillips, A. H.
Potter, R. P.
Sexton, W. G.
Vedder, H. A.
Vedder, J. B.

Mattoon:
Partridge, O. F.

Mauston:
Christensen, H. W.
Hess, J. S., Jr.
Hess, J. S., Sr.

Mayville:
Bachhuber, A. E., Sr.
Bachhuber, F. G.

Mazomanie:
Schultz, I.

McFarland:
MacLachlan, W. G.

Medford:
Elvis, E. B.
Norton, D. M.
Nystrum, L. E.
Nystrum, R. C.

Mellen:
Lockhart, C. W.

Melrose:
Lavine, I. H.

Menasha:
Corry, F. M.
Forkin, G. E.
Jensen, F. G.
O'Brien, P. T.

Mendota.
Green, M. K.
Sauthoff, Aug.

Menomonee Falls:
Burkhardt, E. W.
Domann, W. G.
Schloemer, A. J.

Menomonie:
Blosmo, O. J.
Butler, F. E.
Grannis, I. V.
Halgren, J. A.
Heising, A. F.
Long, D. T.
Lumsden, Wm.
Quilling, P. A.
Steves, B. J.

Merrill:
Austria, W. F.
Bayer, Lester J.
Bayer, W. H.
Fechtner, H.
Hinckley, H. G.
Kelley, F. L.
Kuehl, F. O.
Lane, Francis C.
Morris, K. A.
Ravn, Bjarne
Ravn, E. O.

Merrillan:
Lowe, John W.

Middleton:
Allen, C. F.

Milltown:
Bergstrom, L. V.
Nicholson, J. D.

Milton:
Crosley, G. E.
Davis, M. D.

Milton Junction:
Coon, G. E.
Vogel, T. L.

Milwaukee:
Ackermann, Wm.
Adamkiewicz, J. J.
Allen, L. L.
Altenhofen, A. R.
Ansfield, D. J.
Armbruster, J. L.
Augur, Alexander
Ausman, D. C.
Aylward, T. J.
Bach, E. C.
Bach, J. A.
Bach, M. J.
Bach, R. J.
Bachus, A. C.
Backus, E. A.
Baer, C. A.
Ballard, James A.
Baranowski, S. A.
Bardenwerper, H. E
Barnes, J. S.
Barrock, J. J.
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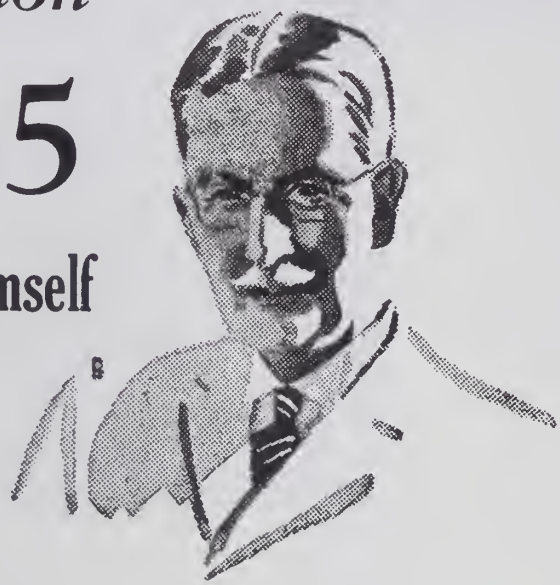

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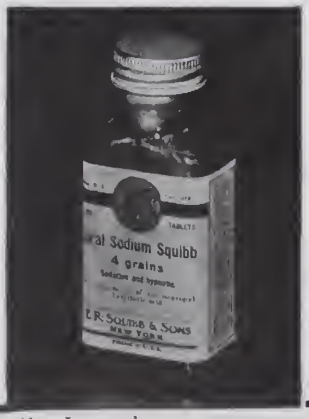

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THE JOURNAL BOOK SHELF

BOOKS RECEIVED FOR REVIEW

The 1935 Year Book of General Medicine. Price $3.00, postpaid. The Year Book Publishers, 304 South Dearborn St., Chicago, Ill.

Behavior Development in Infants. By Evelyn Dewey. A survey of the literature on prenatal and postnatal activity, 1920–1934. Columbia University Press, New York, N. Y. Price $3.50.

Russell A. Hibbs, Pioneer in Orthopedic Surgery, 1869–1932. By George M. Goodwin, Columbia University Press, New York, N. Y. Price $2.00.

The Human Foot. By Dudley J. Morton, Associate Professor of Anatomy, College of Physicians and Surgeons, Columbia University. Price $3.00. Columbia University Press, New York, N. Y.

Tumors of the Urinary Bladder. By Edwin Beer, M. D., visiting surgeon, Mount Sinai Hospital; consulting surgeon, Bellevue Hospital, New York, N. Y. Price $3.50.

Prescription Writing and Formulary. By Charles Solomon, M. D., assistant clinical professor of medicine, Long Island College of Medicine. J. B. Lippincott Co., Philadelphia.

Surgery: Queen of the Arts. By William D. Haggard, M. D., Nashville, Tenn. Professor of Clinical Surgery, Vanderbilt University School of Medicine; Surgeon to Vanderbilt Hospital and St. Thomas Hospital; President, Southeastern Surgical Congress; former President of the American Medical Association. Cloth $5.50 net. W. B. Saunders Co., Philadelphia.

Lactobacillus Acidophilus and Its Therapeutic Application. By L. F. Rettger, Ph.D., Professor of bacteriology in Yale University; Maurice N. Levy, M. D., practicing physician, Bridgeport, Connecticut; Louis Weinstein, Ph.D., James E. Weiss, Ph.D., research fellows in Yale University. Price $2.50. Yale University Press, New Haven, Conn.

Modern Home Medical Adviser. By Morris Fishbein, M. D. Price $9.50. Doubleday, Doran and Company, Publishers, Garden City, N. Y.

BOOK REVIEWS

Any scientific publication reviewed in this column may be obtained for inspection. Orders for such inspection should be directed to the Medical Library Service, 424 N. Charter Street, Madison, Wis.

Human Sterility. By Samuel Raynor Meaker, M. D., professor of Gynecology, Boston University School of Medicine. Price $4. The Williams & Wilkins Company, Baltimore.

One of the most baffling problems in the field of human reproduction is that of sterility. As old as the race itself, it has been surrounded and encumbered by superstition and ignorance. The last few years have witnessed truly remarkable advances in the field of human sterility and one of the pioneers has been the author of this book. Dr. Meaker has established in Boston a clinic specially planned for the scientific study of sterility in all its various aspects and this volume represents the results of their investigations. All of the problems involved are most exhaustively and painstakingly considered and this is especially true as regards diagnosis and treatment. The organization and management of the clinic group are described and explicit directions given as to the study of such patients.

The book can be recommended most enthusiastically to all those interested in human reproduction. The physician treating cases of sterility will find it a veritable mine of information. It is, without doubt, the best book on the subject with which the reviewer is familiar. J. W. H.

The Compleat Pediatrician. By Wilburt C. Davison, M. D., professor of pediatrics, Duke University School of Medicine, and pediatrician, Duke Hospital. Printed by Seeman Printery for Duke University Press, Durham, North Carolina.

This book might be designated as a compendium with a college education—and a mighty fine one at that. Too brief to be called a text-book, too complete for a compendium, it concisely summarizes the most valuable and useful information required in

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Laryngoscope 1935 XLV, 149-154
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the daily practice of pediatrics. A unique feature of the book is the way in which the subject matter concerning the diagnosis, treatment and prevention of disease is correlated. This is accomplished by a system of numbered paragraphs refering back and forth between related facts in the different chapters.

The contents are divided into the following chapters: symptoms and signs of diseases in children; diseases, differential diagnosis and treatment; preventive measures and child care; general suggestions for the feeding of normal infants and children; drugs and prescriptions frequently used in pediatrics; laboratory methods frequently used in pediatrics.

As might be expected in any book where the information is as condensed as much as possible without undue loss of completeness, omissions do occur. For example, the treatment advised for tetanus is given in great detail in regard to sedation and administration of antitoxin, but includes no mention of the care of the wound. Again, the recommendations for the artificial feeding of infants are concerned with lactic acid milks alone and information concerning the construction of sweet milk dilution mixtures is entirely omitted. However, in spite of the few omissions the book is such a marvelous collection of facts in a readily accessible form that every physician who has anything to do with children ought to have it on his desk or in his bag. J. E. G.

The Autonomic Nervous System. By Albert Kuntz, Ph. D., M. D., Professor of microanatomy in St. Louis University School of Medicine. Second edition, enlarged and thoroughly revised. Price $7.50. Lea & Febiger, Washington Square, Philadelphia, Pa.

The first edition of this work, which appeared in 1929, was a successful attempt to compile within a readable volume of usable size a correlated presentation of the anatomic data and physiologic conceptions of the sympathetic nervous system and their surgical applications to it. In this, the second edition, the text has undergone considerable revision and has been extended about ten percent.

The first part of the book which treats of structure and development, naturally, has been little altered. The chapter on the unsettled subject of the autonomic innervation of skeletal muscle has been in part rewritten and the more recent results and interpretations of investigators presented. Several pages are devoted to a consideration of the controversy which has arisen within recent years between Boeke and Wilkinson, the author inclining toward Boeke's viewpoint and interpretation.

In the section dealing with the sensitivity of the viscera the author propounds his conception, the result of his own recent experimental investigations on cats, that sensory fibers of upper thoracic nerve origin join and pass within the sympathetic trunk to the head and neck, confirming the opinion of Fay that afferent components of the upper thoracic nerves extend into the cephalic region along the carotid arteries.

The chapter on periarterial sympathetectomy, ganglionectomy and ramisection has been in large part rewritten in the light of the extensive amount of surgery which has been performed for the relief of various conditions and diseases.

The bibliography of some 2500 titles arranged according to the chapters in the text is an exceedingly invaluable part of the book. In the opinion of the reviewer this work has a very definite place as a reference text in the library of the medical practitioner and the surgeon. F.D.G.

Modern Treatment in General Practice. By Cecil P. G. Wakeley, D. Sc., F. R. C. S. William Wood & Company, Baltimore.

This book consists of a series of fifty-six brief monographs on some of the diseases and conditions frequently met with by the general practitioner. These articles comprise not only conditions falling in the field of general medicine or general surgery, but the various specialties as well. Special stress is laid upon diagnosis and treatment and, as a rule, only those remedial measures which have been found of proven worth are recommended. It should prove a useful book for the general practitioner. R. V. V.

Diabetic Manual for Patients. By Henry J. John, M. A., M. D., director of the diabetic department and laboratories of the Cleveland Clinic. 2nd edition. Price $2.00. C. V. Mosby Company, St. Louis, Missouri.

This volume is well printed and extensively illustrated with a few photographs and a great many drawings and charts. It represents a very careful attempt to educate the diabetic in the details of understanding his condition and caring for himself at home. The detail is not so much a matter of special recipes and menus as of understanding the pathologic processes and their clinical management. There is no attempt to separate information which the patient should have from that which must be secured from the family physician or the specialist in diabetes. This information is, however, provided in fairly simple language which most intelligent patients will appreciate and grasp. The drawings help a great deal to visualize mathematical concepts such as the per cent composition of food, the problems of arteriosclerosis, heredity and age. E. L. S.

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Nature's Way. By Victor C. Pedersen, M. D., Price $1.00. G. P. Putnam's Sons, New York, New York.

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Regardless of one's reactions to the method advocated the book should be of interest and value to those interested in the medical and social aspects of birth control. J. W. H.

CARCINOMA

(Continued from page 921)

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